
Wales Street Primary School uses harvested water to rejuvenate school grounds

WALES STREET PRIMARY SCHOOL, IN THE INNER MELBOURNE SUBURB OF THORNBURY ABOUT 7KM FROM MELBOURNE'S CBD, HAD A WELL-GRASSED OVAL, AND DECIDED TO INSTALL AN UNDERGROUND IRRIGATION SYSTEM TO KEEP THE GROUND IN SHAPE. HOWEVER, AFTER THE SYSTEM HAD BEEN INSTALLED, THE DROUGHT ARRIVED AND THEY WERE UNABLE TO USE IT. WATER RESTRICTIONS MEANT THEY COULDN'T USE MAINS WATER, AND THE OVAL GRASS DIED. DESPITE SEVERAL ATTEMPTS TO RE-SEED IT, IT DEVELOPED INTO A SUMMER DUST BOWL.

THE SITUATION

The Wales Street Primary School community, including teachers and parents, became increasingly concerned about the state of the oval. They valued this grassy space as part of the educational environment – providing a softer playing surface for games, sport and class use. When rain did come, it caused substantial water erosion due to the slope of the land. They decided to do something about it.

THE GRUNDFOS SOLUTION

The school approached IrwinConsult Pty Ltd to design a rainwater harvesting system, and to apply for a Federal Government Community Water Grant to install a 65,000 litre underground tank fed by an underground system of pipes.

The grant application secured \$50,000 which enabled the work to proceed.

TOPIC:

An installation that has been a great lesson in water conservation to the students.

LOCATION:

Wales Street Primary School, in the inner Melbourne suburb of Thornbury

COMPANY:

IrwinConsult Pty Ltd

Rainwater is captured directly from the school hall and indirectly from two other school buildings via the stormwater drain which is diverted into the tank.

A Grundfos CHI4-50 multistage transfer pump, which delivers one litre per second at 380 kpa, was installed as part of the overall system and this pumps water through the irrigation system.

Designer Lance Blackley, of IrwinConsult, says the system will harvest almost three quarters of a million litres of water each year – more than enough to irrigate the 1,700 square metre school oval.

The tank is about a third full, and the school is now waiting for the autumn and winter rains to fill it.

THE OUTCOME

The Wales Street Primary School Principal, Mr. Chris Sexton, says the system – while yet to be fully utilised – will prove highly beneficial.

“However, it has been tested and works extremely well,” says Mr. Sexton.

“The installation has been a great lesson in water conservation for our young students, and I am particularly proud of the parent group, led by Kate Phillips, who made the system a reality.