

Schools Water Efficiency Program

DATA LOGGERS FOR SCHOOLS

Information Sheet



WHAT IS THE SCHOOLS WATER EFFICIENCY PROGRAM?

The Schools Water Efficiency Program (SWEP) is a voluntary program which is open to all schools within Victoria. Currently in its second phase, the program enables schools to continuously track their water usage through a water data logger. The data is then accessed by facility managers, teachers and students through an interactive website. SWEP enables schools to thoroughly monitor water usage and detect leaks so they can be rectified, allowing schools to save water and in most cases save money as well. The program also provides students an opportunity to learn about water efficiency through maths concepts such as measurement and data in a tangible and realistic environment.

The original program was launched in 2006 and assisted more than 1700 schools across Victoria to save water and money and to also raise awareness of water conservation. This phase of SWEP is supported by the Water Learn it Live it curriculum (data logging module) and will operate over a minimum of three years.

BENEFITS TO SCHOOLS

By participating in this program schools are able to:

- Access two water data loggers and installation per school at no cost to the school.
- Access leak detection systems to identify problem areas, allowing schools to improve water efficiency and therefore saving substantial amounts of money and water.
- Access detailed reporting and analytical data for up to date water consumption.
- Access a tailored curriculum, which incorporates the school's water data in mathematics and sciences as well as providing students with robust water saving messages which they can apply at home.
- Gain a better understanding of water consumption zones within a school, helping students to apply it in a household setting.
- Access school-specific data via a user-friendly, functional and interactive website for the first year of the three-year program. A data hosting and access fee is required for years two and three.

PROGRAM OBJECTIVES

- The supply and installation of up to two data loggers to any Victorian school that participates in the program.
- The maintenance, including battery replacement, and ongoing support for schools that currently have data loggers contracted with an existing service provider.
- The identification of leaking pipes, faulty appliances and high water use periods in the schools.
- The development and launch of a web site, for the delivery of school-specific water consumption data, in collaboration with education materials and the ability to report on school water consumption.

HOW MUCH DOES SWEP COST?

In addition to the two water data loggers, schools also receive access to the SWEP web site for the first year of the program at no cost. Following the completion of the first year, schools will be required to pay a data hosting and access fee of \$150 per-year plus GST for the following two years of the program.

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HOW TO REGISTER

To register your school for SWEP or to find out more, visit www.myswep.com.au or contact a member of the SWEP project team.

CASE STUDIES

A water industry study conducted across 25 Melbourne metropolitan schools in 2008 showed an annual overall reduction in water consumption of 29 per cent.

The schools involved were provided with data loggers, a web platform, curriculum materials, and staff training to enable teachers to integrate water consumption data into classroom activities.

In a separate trial across 20 schools, data loggers were used for water management only and were not incorporated into the curriculum. These schools achieved considerably less savings with an overall annual reduction of 10 per cent.

The results of these trials identify the importance of training teachers in applying the technology in the classroom. It can also lead to water reductions throughout the community by encouraging students to monitor and understand water consumption around the home.

In many of the schools the identification of leaks occurred within the first few days of monitoring. Once identified, fixing the leak provided a benchmark for determining water savings in comparison to the cost of the repair.

The table below outlines the relationship between repairing leaks and the ongoing financial savings achieved for the school by undertaking the repairs.

WHO PROVIDES SWEP TO SCHOOLS?

SWEP is delivered through the Department of Sustainability and Environment and the Department of Education and Early Childhood Development. SWEP is project managed by Yarra Valley Water on behalf of the Victorian Government.

School	Volume leak repaired (KL per annum)	Estimated cost saving (\$ per annum)	Detection and repair cost (\$ per incident)	First year savings
Carwatha College	4,260	\$9,491	\$3,527	\$5,964
Pakenham Secondary College	2,984	\$6,648	\$3,330	\$3,318
Hallam Primary School	1,373	\$3,059	\$2,059	\$1,000
Mentone Primary School	1,067	\$2,377	\$2,961	-\$584
Lyndale Secondary College	501	\$1,116	\$1,547	-\$431
Total	10,185	\$22,692	\$13,424	\$9,268
Average	2,037	\$4,538	\$2,685	\$1,853

FOR MORE INFORMATION ON THESE CASE STUDIES CONTACT A MEMBER OF THE PROJECT TEAM.

SWEP PROJECT TEAM

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