

## 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.
- ♦ Undertake high level leak detection at school premises to identify and to determine action paths to improve the schools overall efficiency. This saves money and water! Access to a tailored curriculum, which incorporates the school's water data in mathematics and sciences as well as providing students with reliable 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.
- ♦ The program's accessibility – any school with a computer can access the program and they don't necessarily need to be on mains water.
- ♦ 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 of \$150 (ex GST) is required for years two and three.

**(Note:** The data logger, installation costs and first year web fees will be met by SWEP and a school only needs to meet the web fees for years two and three).

## 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.

## HOW TO REGISTER

To register your school for SWEP or to find out more, visit [www.myswep.com.au](http://www.myswep.com.au)

You can also find out more information by visiting:

[www.water.vic.gov.au](http://www.water.vic.gov.au)

[www.waterlili.com.au](http://www.waterlili.com.au)

Published by the Victorian Government Department of Sustainability and Environment Melbourne, July 2012

ISBN 978-1-74287-591-0 (print)

ISBN 978-1-74287-592-7 (online)

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# DATA LOGGERS FOR SCHOOLS



## WHAT IS THE SCHOOLS WATER EFFICIENCY PROGRAM?

The Schools Water Efficiency Program (SWEP) is a voluntary program open to all schools within Victoria. Currently in its second phase, SWEP enables schools to continuously track their water consumption by using data logger technology. The schools data can be accessed by facility managers, teachers and students through an interactive website.

The program 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 provides students an opportunity to learn about water efficiency through maths concepts such as measurement and data in a tangible and realistic environment.

This phase of SWEP is supported by the Water Learn it Live it curriculum (data logging unit) and will operate over a minimum of three years.

## 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.

*Data loggers fitted to water meters enable schools to monitor and manage their water usage, increasing their efficiency and enabling them to fix problems such as leaking pipes quickly. By using the supporting education materials at the same time, the school will save water and money and set a great example to students.*

Tony Kelly  
Managing Director  
Yarra Valley Water



Image of the SWEP website

## CASE STUDIES

A water industry study was conducted with 45 schools, 25 of these schools were provided with data loggers, a web platform, curriculum materials and staff training. When integrating water consumption data (from the data loggers) into classroom activities, significant savings were achieved.

These 25 schools achieved an average annual per capita reduction in water consumption of 29 per cent.

The remaining 20 schools using data loggers for water management only and did not incorporate this technology into the curriculum achieved considerably less savings, on average 10 per cent.

*'The results of these trials identify the importance of training teachers in applying the technology in the classroom.'*

It may also lead to further water reductions 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.

*It is up to our children to carry this through to future generations, so it is essential that they understand the importance of water and how to use it in the most sustainable way possible.*

Kerry Archer  
Environment Coordinator  
McClelland College

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

SCHOOL	VOLUME LEAK REPAIRED (KL per annum)	ESTIMATED COST SAVING TO SCHOOL (\$ per annum)	DETECTION AND REPAIR COST (\$ per annum)	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
<b>TOTAL</b>	<b>8,617</b>	<b>\$19,198</b>	<b>\$8,916</b>	<b>\$10,282</b>
<b>AVERAGE</b>	<b>2,872</b>	<b>\$6,399</b>	<b>\$1,796</b>	<b>\$3,427</b>

## HOW MUCH DOES SWEP 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.

