

Summary

This activity has been developed to encourage our customers to adopt good habits in their use of water and disposal of waste water. By completing a water audit for their school, we hope to engage with children about the importance of responsible use of water both at home and school.

Aim

Participants will identify at least one way in which they can change their behaviour towards use of water and or/influence other people in their household or community to change their behaviour.

Objectives

Participating will understand that:

- water is a precious resource and should be used wisely
- we all use water in a wide variety of ways
- in large institutions, like schools, there are various 'hard' measures which may be used to help with saving water
- water and energy use are linked, saving water can save energy and money
- there are easy ways to change behaviour to reduce personal water use.

National Curriculum links

The school and home versions of the audits are relevant to the curriculum and will form an important part of the education package associated with the schools retrofit project.

Independent Review of the Primary Curriculum: Final Report – Programmes of Study

Historical, geographical and social understanding

L3. to investigate local and global issues by using ICT to analyse and process data.

L11. ways in which environments can be managed sustainably and why this is important now and in the future.

Cross-curricular studies

Children should have opportunities:

- a. to develop and apply skills of literacy, numeracy and ICT, particularly through reading and analyzing historical documents, using maps, charts and measurements in fieldwork, and interrogating databases of information about people and services.

- b. to extend their personal, emotional and social development, particularly by learning to work collaboratively with others in community activities to improve the environment and to carry out first-hand investigations in their locality.

Mathematical understanding

L31. to answer questions or test hypotheses by using ICT to collect, store, analyse and present data.

L32. to use ICT to represent data on a scatter graph, and proportional data in a pie chart in order to explore possible relationships and interpret the findings.

Other Educational Initiatives

DCSF Sustainable Schools Framework

- Energy and water
- Purchasing and waste

Eco Schools

Every Child Matters: Social and emotional development

Assumptions

- A majority of families have access to a computer and the internet at home, 99% of schools now have internet connected computers
- Most children and many adults have some familiarity with entering data into a computer.

Resources

Internet access

Access to the Severn Trent Water online school water audit

Printed copies of data collection sheets

Setting up and running the activity

Pupils carry out an audit of the water use in their school using a downloadable data collection sheet designed to match the look and feel of the on-screen audit software. At the computer the data are entered into the data collection application which will comprise a series of data input screens and a summary screen which emulates a spreadsheet.

'Info' buttons against each question will provide factual context to aid data input. The summary shows the data in a spreadsheet format with calculations carried out to show monthly and annual consumption of water, based on assumptions derived from Severn Trent Water data.

Buttons give options to view:

- Printable, personalised report (text, graphs and water saving chart) generated from the data given indicating where water efficient changes could be made.
- Further information on water-saving measures eg Save-a-Flush bags, leaking taps etc.

- Bar and pie charts of annual water consumption with options to view 'before' and 'after' charts showing the effects on consumption of water – saving measures.
- 'Rating' comparisons of water consumption based on reports provided by Aqualogic to participating schools.

Plenary or discussion for informal session

Participants to state ways in which we can change our behaviour to reduce our water use

Why is it important that we all act to reduce our water use?

What are you going to do when you go home?

Who will help you to achieve these water savings and who else can you influence?

What can we do around the school to help save water?

Facts to support the facilitator

UK average = 140 litres per person per day

USA average = 575 litres per person per day

Mozambique average = 4 litres per person per day

Data provided by UN Development Programme Report 2006

Why should we reduce our water use?

When Severn Trent Water cleans water for drinking and cleans sewage before returning the effluent to our rivers and streams, we use large amounts of energy which contributes to man-made climate change.

Producing 1 litre of clean water generates 1.2g of carbon dioxide.

Reducing water use can help to prevent rivers and aquifers from drying out. Scientists predict that we may have hotter, drier summers in the UK as a result of climate change. Therefore, water resources may be put under stress, and are in some parts of the Severn Trent Water region.