

Waterwise detective activity: spot the ways to save water

The following are suggested Waterwise behaviours that are evident in the buckets poster and may be discussed or emphasised with students. There are 20 suggestions in total given here.

› Inside the home

Kitchen

- ◆ A water-efficient dishwasher is installed and being used for full loads only rather than washing dishes by hand in the sink (see WELS label)
- ◆ Vegetables are being washed in a bowl rather than under running water
- ◆ Small container on the windowsill for collecting the warm-up water *

Bathroom

- ◆ A four-minute timer is used in the shower to encourage shorter showers
- ◆ A water-efficient showerhead is installed
- ◆ Teeth are being brushed using water in a plastic cup rather than under a running tap
- ◆ Greywater bucket is being used for collecting the warm-up water

Toilet

- ◆ A water-efficient dual flush toilet is installed and the half flush button is being used (see WELS label)
- ◆ A rainwater tank is connected to fill the toilet cistern

* indicates Waterwise behaviours that are more difficult to spot in the drawing and may potentially be worth 'double points' if simply doing a 'how many can you find' activity.

Laundry

- ◆ A water-efficient front-loading washing machine is installed and being used for full loads of clothes (see WELS label)
- ◆ A rainwater tank is connected to the cold water tap and washing machine in the laundry

› Outside the home

Garden

- ◆ Waterwise (i.e. plants that do not require a lot of water) and greywater suitable plants are used in the garden*
- ◆ Greywater hose from the washing machine flows onto the garden
- ◆ Greywater is collected from inside the house using buckets and containers and is poured on the garden using a watering can
- ◆ Mulch is used on the garden*

Other

- ◆ Cars and bikes are washed with water from a rainwater tank using a bucket and sponge
- ◆ Cars and bikes are washed on a grass area so that water is absorbed into the soil
- ◆ Dog is being washed in a large tub filled with warm-up water collected from the shower
- ◆ A cover is used on the swimming pool to reduce evaporation by the sun*
- ◆ A rainwater tank is the source for any outdoor water use

Bucket loads of savings!

Guidelines for use



More information

Visit the Department of Environment and Resource Management website www.dews.qld.gov.au
 Email: waterwise@dews.qld.gov.au
 Phone: 13 QGOV (13 74 68) business hours



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Great state. Great opportunity.

waterwise
Queensland



Introduction

The *Bucket loads of savings!* (buckets) poster has been updated to reflect current water-saving principles.

New illustrations give a more contemporary look and the content has been changed to reflect more positive behaviour. The new poster also includes updated information such as water efficiency labelling (WELS), water tanks, recycled water etc.

The following guidelines outline how the poster can be used to stimulate inquiry. This is not an exhaustive list, you may have other ideas (and we welcome your suggestions).

These guidelines also identify how the poster can be linked to the Waterwise schools program, *Water: Learn it for life!* (see the Department of Environment and Resource Management website for details of the program at www.nrw.qld.gov.au/waterwise/education).

A *Bucket loads of savings!* brochure is available for co-branding by your council and can be sourced by emailing Waterwise@derm.qld.gov.au. Councils are encouraged to co-brand these and print for distribution. These can be given to students to take home where they can be encouraged to discuss them with their parents/carers and other family members.

Using the buckets poster

It is recommended that councils make use of the buckets poster and brochure in a variety of situations. Examples include displaying the poster in council foyers, libraries, customer service or shopping centres; inclusion of brochures in new resident's kits; or using both as part of water education programs in schools and elsewhere.

The Waterwise schools program, *Water: Learn it for life!* is being offered across Queensland and the poster will reinforce messages promoted within the program. The poster can be used in conjunction with lesson plans outlined in the *Water: Learn it for life!* program or as a stand alone resource.

Curriculum links

The following are suggestions for ways in which you can link a presentation using the poster with activities contained in the *Water: Learn it for life!* curriculum resource.

› Prep to Year 1

Mini-inquiry 4—How can we save our water?

In this inquiry, students investigate how they can save water at home. The buckets poster provides additional stimulus for students to discuss and explore actions they can undertake at home that will save water.

› Years 2 to 3

Unit 1—Lesson 2: Water walk

The buckets poster could be used before or after this lesson to compare how water is used, accessed and wasted around the home. This provides a good extension to the exploration of water use **at school**, undertaken in lesson 2.

Unit 1—Lesson 7: Community water use

The buckets poster provides an excellent opportunity to expand on ideas covered in Lesson 6. As a follow up, the poster can be used to explore in a more detailed way how water can be saved in the different locations where it might be used around the home. With assistance from the teacher,

students are also given the opportunity in this session to question the water educator about their job/role within the council, and how they use and manage water responsibly in their work. You may wish to prepare some additional material to present to students.

Unit 2—Lesson 4: Poster talk

In this lesson students are evaluating posters. The buckets poster could be presented, discussed and analysed prior to this lesson as an effective introduction and lead in to the lesson. There should be an emphasis on the different components of the poster and how it communicates its messages.

› Years 4 to 5

Unit 2—Lesson 3: Water tickets please!

The buckets poster provides an excellent opportunity to expand on ideas covered in Lesson 3. As a follow up, the poster can be used to explore in more detail ways that water is used around the home. The Water tickets please! activity might be adapted to an at home activity and linked via the poster to the idea of saving water at home. Creating this additional link to water savings at home provides valuable insight into the idea of conserving water. This is the theme of Lesson 4.

› Years 6 to 7

Unit 1—Lesson 2: Saving water at home

In this lesson, students brainstorm ideas about water-saving behaviours. There is a strong opportunity here for use of the buckets poster to supplement this list after they have finished the brainstorming part of the lesson. The presence of a council water educator also lends itself well to leading into discussion in the next part of the lesson looking at Waterwise strategies, including the council's. The poster can be analysed in terms of its appropriateness to that age group, as well as the strategies employed to convey its messaging.

Lesson 3 requires information about water supply and treatment in the local area so there is an opportunity for the water educator to deliver this information.

Classroom activities

The following are a set of possible activities for use with students when showing the buckets poster. Selection of activities will need to be made based on the age and needs of the group being catered for. Activities are sequenced in likely order of complexity. Most activities are posed as short questions but with preparation each activity could be expanded into in-depth or more detailed activities.

It is suggested that each activity be adjusted to higher or lower age range through simple variations such as making them group or individual tasks, or setting the tasks with or without the initial use of the poster as a reference, i.e. for younger students you may start with the poster but with older students you could get them to provide their ideas first and then show the poster.

The *Bucket loads of savings!* brochure provides a useful co-branded resource for councils that water educators can hand out to students to reinforce their learning and assist in getting the Waterwise message home to parents and carers. You can suggest that students ask parents or carers how many water saving activities they can find.

1. Students explore how much water is in a bucket using an array of different vessels such as cups and drink bottles. Ensure water is reused wisely when finished. This is a way of demonstrating how much water is used in terms they can easily relate to.
2. Students name areas inside and outside the home where water is used.
3. Students name the ways water is used in the poster.
4. Students name five things people are doing to save water in the poster.
5. Students list ways water might be wasted inside and outside the home. Students try and find the correct behaviour on the poster.
6. Students name how many Waterwise behaviours can be seen in the poster: Waterwise detective activity.
7. Students answer direct questions about the Waterwise behaviours in the poster. Such as:
 - a. Where does the water come from that is being used to water the garden?
 - b. What is on the swimming pool and why?
 - c. Why is the car being washed on the grass?
 - d. What is different about the water being used outside the house compared to the water being used inside the house?
8. Students name other things they or their parents do at home that aren't in the poster that also save water.
9. Using the actions from the poster, get the students to play charades and try to guess what Waterwise behaviours are being acted out.
10. What differences can students see in this poster compared to what is done at home (spot the difference)?
11. Students design and create their own buckets poster using Waterwise behaviours they do at home, or at school.
12. Students calculate the total water savings from the five Waterwise ways boxes on the poster:
 - a. in buckets
 - b. in litres
 - c. per person in the house each day
 - d. for the household for a week / month / year
13. An Olympic swimming pool (50m x 25m x 2m) holds 2,500,000 litres of water.
 - a. Students work out how many households per day it would take using the five highlighted Waterwise ways from the poster to fill an Olympic swimming pool with their savings or how long one household would take to do this?
 - b. Using these five main ways of saving water, students work out what size town it would take to save the equivalent of 20 Olympic size swimming pools each day. Can students name any towns in Queensland that are about this size?
14. Before being shown the poster, students predict how much water might be saved by each home each day by:
 - a. Installing a water-efficient showerhead
 - b. Using a dual-flush toilet
 - c. Having four-minute showers
 - d. Installing a water-efficient washing machine
 - e. Using the rainwater tank for all outdoor use as well as in the toilet and laundry.
15. Show students the poster, talk about each activity and ask students to estimate how many buckets of water would be saved by carrying out some of the other water-saving activities depicted in the poster. Students give examples of other activities around the home that save water and estimate how many buckets they think would be saved.
16. Students pick two actions from the poster and see how much water might be used in this way by a household each day (research).

