



Every Drop Counts



The major retrofit plan

The job:

- To identify the plumbing fixtures required for a retrofit.
- To budget for retrofitting the plumbing fixtures including calculating the cost benefits.
- To prioritise the retrofitting recommendations.

- * **Reduce**
- * **Repair**
- * **Retrofit**

The story:

Many water savings can be achieved without any cost to the school. Some water savings can only be achieved if the plumbing fixtures are changed to new equipment that reduces the use of water. Most schools could not afford a major retrofit in a single budget year. It makes sense to identify which aspects of retrofitting will provide the greatest benefit. This will enable you to develop a list of costed projects and prioritise their order.

The plot:

Garden taps

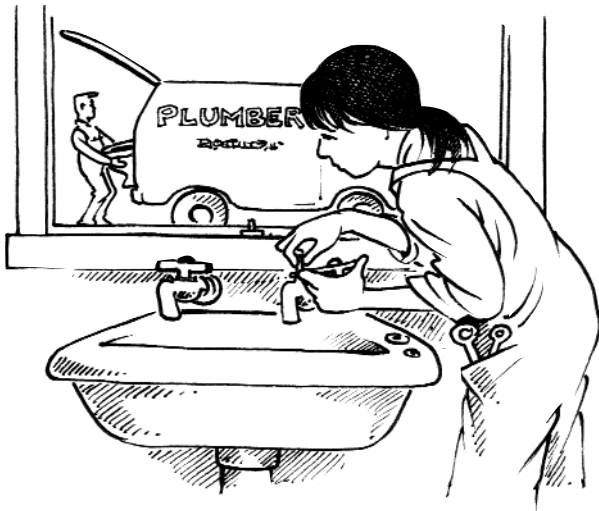
Schools should aim to retrofit all garden taps so they are vandal proof. The old tap handle is unscrewed from the tap bonnet and replaced with a vandal proof tap. This can only be operated with a special key inserted into the top. Unauthorised people can't use the tap. Students can't drink from them and they can't be left running. It also reduces another option for water fights. Vandal proof taps can also be used as restrictors.

Toilets

Installing new cisterns will require a significant budget as they will need to be made from stainless steel. It's worth considering replacing older cisterns with modern and efficient cisterns as older ones need continued maintenance which also costs money. Before working out a budget, find out from the school's plumber what cisterns are available. Old toilet bowls may only have one type of upgrade available.

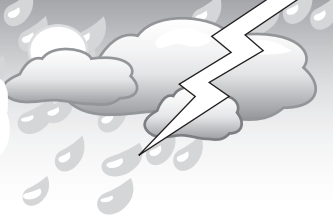
Urinals

If your school has automatic urinals get a quote to retrofit these fixtures with ones that operate on infra-red. The infra-red operated urinals only operate when someone is close by. They will not operate at night and weekends and during class time when nobody is about.





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Hand washing

Most schools have troughs with taps for washing hands. It is desirable to have spring-loaded taps for these troughs. This way the taps can't be left on.

Whether or not you have spring-loaded taps, a restrictor is useful to reduce the amount of water passing out of the tap. Most troughs have a tap on the pipe leading to the trough. If a vandal proof fitting replaces the handle in the tap, the pressure can be adjusted and can't be changed by students. You will need to turn on several of the hand washing taps in the trough and adjust the pressure to the desired flow. Other advantages of adjusting the pressure is that students won't get wet from spray.

Drinking troughs and fountains

It is desirable to have student drinking fixtures with spring-loaded taps and an effective restrictor. The restrictor reduces the water pressure. Not only does less water come through, when properly adjusted it won't present problems with students being squirted with water. When the restrictor is being adjusted, have all the taps on. There should be enough water coming out so students' mouths don't need to touch the fountain as they drink.

Shower heads

Replace the showerheads in the gym with ones that have 'AAA' water efficient rating.

Garden watering

Where practical, replace spray systems with drip systems. You can get students to install drip systems. Drip systems often need longer operating periods to deliver a small amount of water, however in combination with mulching large water savings are achievable.

Science room

It is desirable to have low pressure in science rooms. Besides saving water, it means that a strong gush of water will not accidentally squirt chemicals onto students while they are cleaning glassware. High pressure can cause other accidents with science glassware.

