

Water use reduction in laboratories

Recirculate water used for cooling

Once-through cooling can consume significant amounts of water so water used for cooling should be recirculated rather than running continuously to waste. LabRATS provide [guidance](#) on sustainable water usage. Examples of how other universities have tackled this issue can be found [here](#).

Ensure water-using equipment has as high loadings as possible

Water-using equipment such as glass washers, sterilisers and autoclaves consume significant amounts of water. It is more efficient to make sure that the equipment is full when operated. When buying equipment, the size needed for the task should also be taken into consideration.

Use water efficiently for cleaning and rinsing

Glassware and other articles are often left under running taps for longer than is necessary. In many cases, cleaning in this way is also inefficient. A alternative technique can be to fill with a small amount of water, shake, empty and then repeat.

Efficient use of water baths and heating blocks

Water baths and heating blocks often get switched on and left for longer than needed. Ensure that these are turned off when not in use. Also energy can be saved by insulating water baths.

Efficient use of purified water

Water purification is energy intensive, especially when it is done by distillation. Purified water should be used only when absolutely essential and should be produced by reverse osmosis wherever possible.

Raise awareness of the environmental impact of water usage

Laboratories can consume significant amounts of water and there is potential for wastage through leakage, oversight or choice of equipment. Poor sample rinsing practices can lead to significant waste water as well as dirty samples. Often savings can be made at very little additional cost. A useful guide to avoid wasting water can be found on this [website](#).

Your notes

Remember, you can add additional evidence to your action plan at www.manchester.ac.uk/10000actions