

# Trinity College Dublin

## Water Saving Facts, Tips and Flow Rates

### **College Water Consumption**

1. College uses approximately 300,000,000 litres of water each year.
2. Water is used in teaching buildings, toilet facilities, teaching laboratories, research laboratories, the sports centre, in the College pool, restaurants and the large number of residential accommodation units.
3. Rain water harvesting systems are installed in the Trinity Biomedical Sciences Institute and the recently refurbished residences in House 38 and 40.
4. Ground water is used for watering the recently refurbished hockey pitch in Santry playing fields.
5. Several buildings have green roofs to minimise rain water run off to the public drains. Rain water attenuation tanks are also installed to regulate surface water outflow rates to the public drains.

### **Laboratory and Research Areas**

1. A Liebig water cooled condenser uses 0.0035 litres of water a second. If this was left on in error for 24 hours it would use over 302 litres of water.
2. A rotary evaporator can use 0.012 litres of water a second. If this was left on in error for 24 hours it would use 1,037 litres of water.
3. A water driven vacuum pump uses 0.14 litres of water per second. If this was left on in error for 24 hours it would use 12,096 litres of water
4. Miscellaneous laboratory equipment can have water cooling flow rates of between 0.08 litres per second up to 0.2 litres per second. The lower flow rate will use 6,900 litres of water and at the upper flow rate a huge 17,280 litres of water in a 24 hour period.
5. Turn off ice machines when not in use.
6. Several laboratories use closed loop water coolers which do not discharge water to waste.

### **Teaching, administration and residential areas**

1. Ensure taps are securely turned off in bathrooms and kitchen area
2. Do not wash dishware or cutlery under running taps – use a basin
3. Ensure dishwashers or clothes washers are full for each wash cycle
4. Do not leave tap running while brushing teeth leaving tap running can use up to 7,000 litres of water per annum
5. Where dual flush toilets are available use the short flush when possible
6. A typical shower can consume 0.11 litres per second. A 10 minute shower uses 66 litres of water. Reducing the shower duration to 5 minutes for each day of the year would save over 12,000 litres of water. Plus the significant saving in not having to heat the larger quantity of water.

### **Leaks and Water Management**

1. Always ensure water points are securely turned off when not in use.
2. If you find a water leak report it to [repairs@tcd.ie](mailto:repairs@tcd.ie) identifying the exact location, room number and building.

Estates and Facilities Department

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