Measuring Your Impact 9
Saving Water

Although it often seems that we have plenty of water, many parts of the developing and developed world face regular water shortages. Some simple changes can help many people conserve water.

(a)   An older showerhead uses 150 L for a 10-minute shower, whereas a reduced-flow showerhead uses only 95 L. If you take one shower per day, how many liters of water would you save in 1 year if you replaced your older showerhead?

(b)   An older toilet uses 27 L per flush, whereas a replacement toilet uses only 6 L per flush. If you flush the toilet four times per day, how many liters of water would you save in 1 year if you replaced your older toilet?

(c)   Now let's assume that you have a newer toilet that uses 6 L per flush, but you are considering upgrading to a dual-flush toilet. If you flush the toilet four times per day, but three of those times you could use the 3 L flush, how many liters of water would you save in 1 year?

(d)   If you made all three of the changes described in (a) through (c), how much water, in total, would you save from going down the drain?

(e)   If you lived in a family of four people and you paid $1 for every 1,000 L of water your family used, how much money, in total, could your family save in 1 year with these water conservation improvements?