Water companies should incentivise businesses to use less water and charge households that use high amounts more per unit

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Tim Leunig argues that Britain has a lot to learn from Western Australians about how to use water effectively. They are generous to people who use relatively little water, while charging those who are indulgent a great deal more.

I recently wrote a paper outlining an alternative to the hosepipe ban. I proposed that rather than impose a crude universal hosepipe ban, water companies should incentivise business users to use less water, and if necessary charge households that use particularly high amounts of water more per unit. Charging these households more would encourage them to be sensible, and it would also give the water company a large surplus with which it could incentivise firms to use less water. In the medium term these higher charges could also be used to increase the number of reservoirs, install pipelines from wetter areas, build desalination plants or reduce leakage.

The comments on my article in the Telegraph and elsewhere were by no means universally favourable. Many people thought I was simply being selfish for wanting to water my garden or to fill my daughter’s paddling pool. Other people said that I want rich people to buy up all the water.

But one person pointed out that Perth in Western Australia is already using a system along the lines I propose. Australians are proud of their outdoor lifestyle, and clearly gardens would fry very quickly in the heat of the sun. Using water for irrigation is not seen as an indulgent luxury, but as an essential part of making life enjoyable.

Against that, Perth does not have an abundance of water, and therefore has to use it sensibly. The Western Australian government requires all businesses that use more than 20,000 cubic metres of water a year to construct a ‘water efficiency management plan’. This is a substantial document. Businesses are required to break down how much water they use and where they use it, benchmark their water use appropriately, set one year and three year water reduction targets, and state how they will meet those targets.

The website gives examples of firms that have successfully reduced their water use. A Holiday Inn hotel cut water consumption by 25 per cent, while a local hospital cut the amount of water that it used by 40 per cent. Even more spectacularly a concrete manufacturing plant was able to reduce water usage by more than a half in just eight months.

In addition, the water company allows domestic households to use as much water as they like, but those who use more water face higher charges. Once we subtract water use for air conditioning, swimming pools and hot tubs, and irrigation we find that people in Perth use roughly the same amount of water as people in Britain. We use around 150 litres per person per day, they use around 160. Australians, however, use a lot of water for irrigation: 120 litres per person per day, with an additional 17 litres for swimming pools, hot tubs and air conditioning.

160 litres of water per person per day comes to 58 cubic metres per person per year. Water charges are 78p per cubic metre if the household uses less than 150 cubic metres of water in total per year. After the first 150 cubic metres the price rises to £1 per cubic metre for the following 200 cubic metres. A household of up to six people who do not use water for irrigation, filling their pool, or
for air conditioning will not have to pay more than £1 per cubic metre for their water.

The price per cubic metre increases steadily. These people using more than 950 cubic metres of water per year have to pay £1.41 per cubic metre for all water above this level. If you have a very large garden and you want all of it to be very green then you will have to pay a great deal of money to do so.

In contrast, Britain charges a flat rate of £1.18 per cubic metre. Compared with the Australians, therefore, people who are economic with water get a bad deal here, but people who are profligate get a very good deal, at least provided there is no hosepipe ban.

The Australian system makes much more sense. It is generous to people who use relatively little water, while charging those who are indulgent a great deal more. This means that there is little incentive to cut down on water used for cooking, drinking, or regular showering or bathing. But showering for one hour a day or leaving the sprinkler on for hours on end will cost you a lot of money.

In addition, the water company places sensible restrictions on using similar systems. Perth residents usually have automatic pop-up irrigation systems, controlled by small computers. If you live in the Perth suburb of Beckenham, then you are kindly allowed to irrigate your lawn every third day. Furthermore, you must irrigate your lawn either before 9am or after 6pm. It uses a lot less water to keep your lawn looking good if you water it in the cool of the morning or the evening. These sensible restrictions help not only to ensure that Perth has enough water for standard domestic uses but also that their lawns remain green throughout the long hot summer.

Britain has a lot to learn from Western Australians about how to use water effectively.

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