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The freedom to hose your driveway

A friend of mine is a big fan of air conditioning and the clothes dryer, even when it is sunny. Another friend likes to drive an old V8 Holden, purely for the fun of it. I have my own reservations about their actions, including the possible environmental impacts, but I accept their right to make a choice. And they have higher electricity and fuel bills than I do.

So if people are free to choose how much electricity and fuel they use, why is it that laws exist across Australia that control how much water is used?

What if water is in very short supply, as happens in many parts of Australia from time to time. In a severe supply emergency it may be necessary (and more effective) to prescribe how water can be used to manage demand. This is because very high prices might be needed to push demand to equal supply. There is very little trust by water planners in the ability of prices to achieve this balance, although it works for other commodities. For example, before cyclone Yasi bananas retailed for around $3/kilo. After the cyclone destroyed most of the North Queensland banana supply prices were over $10/kilo, pushing demand to equal supply. People ate fewer bananas and switched to buying more of other fruit or foods. The concern with water is that there are no substitutes to switch to, although like eating bananas, some water uses are discretionary and not essential for public health. There are always ways of reducing these non-discretionary uses, such as limiting outdoor watering. The real issue here is the perceived impact on lower income households and particularly whether it is fair for higher income households to water their lawns or hose their driveways when others cannot afford to. Fortunately we are not going to tackle this thorny issue in this article. Suffice to say, that in time of severe shortage, like those seen in severe droughts in recent years, non-price restrictions have been proven as effective for conserving water.

What is less clear is why these restrictions exist when water is not scarce. By limiting consumption the important information that passes between users and suppliers is blocked.

One of the key functions of price is to convey information about the costs imposed from a decision to consume (or not). A consumer's decision to use more water will impose short-run costs (e.g. electricity, chemicals for treatment) and long-run costs (e.g. potentially bringing forward the timing of the next supply augmentation). Restricting supply prevents this important information flow between users and suppliers. Some users will value being able to water lawns when they like or indeed hose their driveways, and would be willing to pay for it but restrictions prevent them from doing this. Blocked from consuming water they switch to consuming more of some other good (apart from water), for which they hold a lower value. Removing the restriction allows users to purchase more of the good they value most, unambiguously making them better off. Suppliers are also worse off because they have dam's full of product they cannot sell. And let's not forget that suppliers have very high fixed costs which they have to recover. Artificially reducing demand in fact increases water prices for all consumers as the fixed costs are spread over a smaller base.

Also constraining supply can result in the choice of less effective solutions. For example, requirements for water tanks impose significant costs yet water tanks are widely acknowledged as one of the highest cost sources of supply.

Some state governments (e.g. Queensland) have recently taken steps to remove restrictions now that water is abundant. In doing so, these governments have taken a major step to a more mature water sector, where the price signal takes centre stage. I can now join my friends with their clothes driers and V8 cars, and hose my driveway when I like (and pay for it!). It should only be a matter of time before other jurisdictions follow suit. The next challenge is to set water prices to properly reflect costs….

Written by: Ross Muir, Director, Synergies Economic Consulting Pty Ltd

Ross Muir – Director
p: +61 7 3227 9582
e: r.muir@synergies.com.au

Brisbane
Level 8, 10 Felix Street
Brisbane QLD 4000
GPO Box 2605
Brisbane QLD 4001
P 61 7 3227 9500
F 61 7 3221 0404

Sydney
Level 26, 44 Market Street
Sydney NSW 2000
P 61 2 9089 8666
F 61 2 9089 8989

Melbourne
Level 40, 140 William Street
Melbourne VIC 3000
P 61 3 9607 8499
F 61 3 9607 8282

www.synergies.com.au