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# Bottled Water

For many years, Australians relied exclusively on rainwater or tap water for drinking. Now that consumers are turning to bottled water as the healthy and 'pure' alternative to tap water, are we really just wasting our money and the environment?

## The Problem

### Why do we buy bottled water?

Bottled water is increasingly popular in Australia.

Spring water is extracted from natural sources. Other bottled water is simply water from the municipal water supply that has been subjected to additional treatment[1].

Consumers may claim that bottled water is convenient and that it tastes better than tap water. It is also marketed as the healthy alternative to sugared drinks and as the most 'pure' available water[2].

But the health arguments for bottled water are overstated. The choice is not one between sugared drinks and bottled water, but between bottled water and tap water.

There is no evidence that bottled water is more 'pure' than tap water, but plenty of evidence to suggest that bottled water is costly: both to the hip pocket and to the environment.


### Bottled water is expensive

We closely monitor the price of petrol, but are prepared to pay twice as much for a litre of bottled water than we pay for a litre of petrol to fuel our cars.

Is bottled water worth the cost?

Numerous studies show that bottled water is no cleaner than tap water. The Australian Drinking Water Guidelines[3] cover management of tap water supply and are far more stringent than the Code that regulates bottled water[4].

### Environmental Impacts

**In extraction**:
Spring water is extracted from underground aquifers upstream from where the water surfaces. This disrupts aquifer flow, affecting flora and fauna.

**In production**:
Most bottled water is packaged in PET (polyethylene terephthalate) plastic bottles which are derived from crude oil. It can take up to 3L of water to produce 1L of water[5].

**In transportation**:
Transportation of bottled water around the world requires burning of fossil fuels.

**In landfill and the litter stream:**
Although plastic bottles are recyclable, many end up in landfill and take up to 1000 years to break down. When littered they often end up in the sea where they break up in small pieces, killing marine life that mistake them for food[6].

### Did you know?

- For every ton of PET produced, 3 tons of carbon dioxide is released[5].
- Energy is required to fill bottles with water, and in transport, refrigeration, recycling and disposal of water bottles[5].
- We can visually represent the energy embodied in a water bottle by filling one quarter of the bottle with oil. This is because it can take 250mL of oil to produce 1L of bottled water[5].
- Think about the 'energy miles' that your water bottle has travelled. If you must buy bottled water, minimise energy miles by buying local.
- What are you paying for? Over 90% of the cost of a water bottle can be traced back to the bottle, lid and label[6].
- Plastic bottles are among the ten most common rubbish items picked up on Clean Up Australia Day[9].

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## The Solution

### What can we do?

**The best thing to do is to avoid bottled water.**

Australian tap water is world standard drinking water so it is the safe, cheap and sustainable option.

Install a tap filter if you are concerned about the taste or quality of your local tap water [10].

Buy a reusable bottle – there is a great range available from camping stores and other retailers.

Or have a look in the Clean Up on-line store for the latest folding bottle http://www.cleanup.org.au/au/store/product.html?product_id=47

Pick up and recycle any plastic bottles you find as rubbish.

Read about the world's first town free from water bottles: Bundanoon in Australia[7].

**Support the campaign for Container Deposit Legislation**

For over 30 years, South Australians have been able to return beverage containers for cash.

Because plastic bottles are worth money in South Australia, there are far fewer plastic bottles found as rubbish [8].

The Northern Territory announced it too will adopt container deposit legislation in 2011.

Clean Up advocates the national adoption of a redemption scheme and is working with communities nationally to support their efforts.

### Container Deposit Legislation

| Advantages |
|---|
| Reduces litter |
| Reduces landfill |
| Reduces municipal waste management costs |
| Increases recycling rates |
| Encourages producers to use recyclable materials |
| Nominal cost to consumers |
| Closes the loop |
| Also applies to aluminium cans that can be recycled indefinitely |
| Is a terrific fundraising tool for community groups |

### References


1. Australasian Bottled Water Institute http://www.bottledwater.org.au/scripts/cgiip.exe/WService=ASP0003/ccms.r?Roxy=0x0002f062&PageId=6053

2. Australasian Bottled Water Institute http://www.bottledwater.org.au/scripts/cgiip.exe/WService=ASP0003/ccms.r?PageId=5002

3. Australian Drinking Water Guidelines http://www.nhmrc.gov.au/publications/synopses/eh19syn.htm

4. Food Standards Australia New Zealand, "Food Standards Code" http://www.foodstandards.gov.au/foodstandards/foodstandardscode/

5. Pacific Institute, "Bottled water and energy / A fact sheet" http://www.pacinst.org/topics/water_and_sustainability/bottled_water/bottled_water_and_energy.html

6. Bottled Water Alliance, "Bottled environmental damage" http://www.bottledwateralliance.com.au/Did%20you%20know/Opinions/environmental%20damage.aspx

7. Bottled Water Alliance, "Bundanoon – Australia's first bottled water free town" http://www.bottledwateralliance.com.au/en/Blog/Bundanoon.aspx

8 Boomerang Alliance, "CDL in South Australia / Overview and Achievements" http://www.boomerangalliance.org/000_files/26_CDL_in_South_Australia.pdf

9. Clean Up Australia, "Rubbish Report 2009" http://www.cleanup.org.au/au/NewsandMedia/rubbish-report.html?kw=rubbish%20report

10. See HiFlow water systems http://www.hiflowfilter.com.au/



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