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## Everything You Know About Water Conservation Is Wrong

**Forget short showers. Worry about the 6,340 gallons of "virtual water" in your leather bag.**

by Thomas M. Kostigen

Dominant virtual water exporters in addition to the United States are Canada, Australia, Argentina, and Thailand. Countries with a large net import of virtual water are Japan, Sri Lanka, Italy, South Korea, and the Netherlands. Based on estimated global virtual water trade flows, national virtual water trade balances can be drafted, but getting countries to agree on creating a fair market for water isn't easy. "Trade arrangements, access to markets, finance, and foreign exchange must all be taken into account," the WWC says in its report. For poorer countries those are big obstacles.

International companies are also being pitted against one another because of water shortages and competition for existing resources. The food industry, for example, may end up fighting the biofuel industry for access to arable land as the world runs short of water, warns Peter Brabeck, Nestlé's chairman and chief executive. "We will not find sufficient water to produce all the crops," he told the *Financial Times* in February. "There will be a fierce fight for arable land." But that doesn't have to be the case.

"Companies like Coca-Cola, Nestlé, and many others particularly like the water footprint concept," says Arjen Hoekstra, professor of multidisciplinary water management at the University of Twente in the Netherlands. He notes that because many businesses depend on water as a major component for their products, it's in their best interests to ensure supplies are plentiful to avoid the potential conflicts. "Some companies see the business risks attached to water scarcity and seriously look into how to reduce and offset their water footprint," Hoekstra adds.

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In the end, though, water parity and more supply will come only through increased awareness among individuals, as they will drive the larger interests. "It's really about education and getting people to see their own water use and their water footprint; we

think that is the first step in conservation,” says Scott Cullen, executive director of the nonprofit group Grace (Grass Roots Action Center for the Environment). Along with Food & Water Watch, the Interfaith Center on Corporate Responsibility, and the Johns Hopkins Center for a Livable Future, Grace has developed a water footprint calculator for a joint program, [H2Oconserve.org](http://H2Oconserve.org). Initiatives such as this may lead to further developments, such as labeling the water content of products. This, in turn, may lead to even more water-conscious decision making. “Tastes Great...Less Filling...Less Water”—that type of thinking.

It’s time to ask how we can make better use of our water supplies so that virtual water doesn’t remain the ethereal concept its name suggests. It can be a far bigger source of real-world savings. For my part, I now note waste in different forms. I try to plan or order meals more accurately so I don’t have leftovers, and I try to eat lower down the food chain. In short, I try to do what my mother told me as a child—“Eat your vegetables”—because I now know what went into making them: a lot of water.

### **Our Very Wet Footprint**

The average person on earth has a virtual water footprint of about 328,410 gallons each year; that includes everything used to make the food, clothing, and other water-driven products we consume. In China the average footprint is only 185,412 gallons, while in the United States it is 656,012—the largest on the planet. DISCOVER staffers Missy Adams and Corey Powell measured their water footprints using a questionnaire at [Waterfootprint.org](http://Waterfootprint.org) (and you can too). Questions ranged from how many showers they take each week to whether the water runs while they brush their teeth; from their food preferences to their income.

Research Editor Missy Adams has a relatively small footprint (see chart below), in part because she’s light on the laundry and quick with a shower and has a diet driven by vegetables, fruits, and sweets.

Executive Editor Corey Powell likes meat in his takeout, and you’re sure to find chicken breasts and beef in his freezer—something to cook up while he’s watering his garden or hosing off his sidewalk in Brooklyn.

### **VIRTUAL WATER USAGE (annual average per person, in gallons)**

World	328,410
United States	656,012
Missy Adams	469,792
Corey Powell	1,047,437

To determine your own virtual water footprint, go to [waterfootprint.org](http://waterfootprint.org).

### **Where's the Water**

There are 10,460 cubic miles of freshwater available on the planet as a resource each year, and the breakdown of worldwide access to it just isn't equal. But understanding who has the good stuff and who is in need can allow us to maximize commerce in virtual water, helping balance things out. For instance, Kuwait has essentially no freshwater; its residents live off desalinated seawater, which doesn't count as a direct resource. South America, on the other hand, has an enormous surplus of freshwater due to rainfall and its ecosystem, so it is a great exporter of virtual water. Source: [Worldmapper.org](http://Worldmapper.org). (All percentages are estimates.)

*Find out your Virtual Water IQ by taking the [DISCOVER](#) quiz.*

