

Why “Free” Is the Wrong  
Price for Water—Even  
If You Live on \$1 a Day  
Charles Fishman

*‘You can “own” a glass of water, but only until you drink it and pee. Once you pee, you don’t own that water anymore.’*

Mike Young, water economist, The University of Adelaide

When you check into one of the Starwood chain’s Four Points hotels in the U.S. and Canada, you’ll find a couple bottles of water in your room. Nothing unusual about finding bottled water in a hotel room. What is unusual is that the bottled water is a gift from Four Points—no charge, any more than there’s a charge for using the hand cream by the bathroom sink. Four Points puts a little tag around the neck of the bottles: **“It’s water. Of course it’s free.”**

The water is a treat, and the tag is just the right touch—an edge of irony, guaranteed to make guests smile.

But why exactly is the tag funny?

First, of course, it’s funny because in most hotels these days almost nothing is free—from the Wi-Fi to the gym. And, of course, bottled water itself is almost never free *anywhere*. But it’s really funny because everywhere else in life water is in fact free, or essentially free. Can you believe the nerve of all those other hotels, charging you for something as elemental as water?

With a touch of humor, Four Points hotels is tapping something primal in our relationship to water—we don’t think it should cost us anything. The water bills most people in the developed world get

each month from their utility are nominal—in the U.S., it's \$1 or \$1.50 a day for always-on, never-fail, unlimited water service at home. At that rate, you have to flush the toilet 100 times before you've spent a dollar. (The water bill is not even half what the cable TV and cell phone bills are—bills we didn't even have 20 years ago, and now pay willingly.)

In some places, water service is almost literally free. Traverse City, Michigan, the charming tourist town along Lake Michigan's eastern shore, charges \$8.50 for the first 4,500 gallons of water per month. The next 25,400 gallons also cost \$8.50—total. In Traverse City, you can use 30,000 gallons of water a month—1,000 gallons a day, enough for 25 baths—and pay \$17. Forget flushing the toilet—in Traverse City, you can fill a swimming pool for less than the price of a bottle of Merlot.

In most communities, in fact, the water bill isn't for water at all—it is typically just for the cost of getting the water to us, the pumps, the electricity, the staff to monitor water pressure and water safety, and to be on stand-by for water-main breaks. The water itself costs nothing.

But “free” turns out to be exactly the wrong price for water—whether that water is being used by global corporations, farmers, ordinary middle-class citizens, or the poorest people on Earth.

Water that is so cheap provides no incentive for big users—companies, farmers, even cities—to spend the money necessary to better manage their water. Why spend \$1 million to use \$100,000 less water? And inexpensive tap-water service for industrialized societies doesn't pay its carrying costs—that's why municipal water systems are crumbling, because the water service is so cheap that utilities don't have the revenue to maintain, let alone modernize, water systems.

Poor people living in developing countries—who have to stand in line for water, or walk for hours to get it from wells that may well be contaminated—pay the highest cost of all for “free” water, sacrificing time, good jobs, and even the educations of their children in order to secure their daily ration of water. In many places, in fact, poor people have begun to self-organize small water systems, which they gladly pay monthly fees for, so they can send their children to school and

work jobs with fixed daytime hours (when they might otherwise be standing in line at municipal water spigots).

Indeed, if you had to pick a single problem with water, if you had to pick a single reason that our relationship to water is out of whack, it is captured in that hotel slogan: “It’s water. Of course it’s free.”

Although we don’t often consider it, free isn’t that great. The lack of a price—on water or on any other resource—leads to all kinds of inequities and inefficiencies. Water is the most vital substance in every aspect of human endeavor, but the economics of water are a mash-up of tradition, wishful thinking, and poor planning.

In Las Vegas, the water supply is in such desperately critical shape that the water utility pays homeowners \$40,000 per acre to rip up their lawns. And yet Las Vegas has among the lowest residential water rates in the country. A typical family’s bill there is \$23.62 a month. In Atlanta, the same amount of water would cost you \$50.

Water is the most vital substance in every aspect of human endeavor, but the economics of water are a mash-up of tradition, wishful thinking, and poor planning.

In Napoleon, Ohio, Campbell's Soup operates the largest soup factory in the world. To get its water, Campbell's simply puts its huge water intakes into the Maumee River and takes all the water it needs. No charge.

In California's Imperial Valley, the vast agricultural basin from which much of our carrots and lettuce and broccoli come, the water is imported from the Colorado River through a network of canals. The water is essential to farmers in the Imperial Valley, which gets just 3 inches of rain a year and qualifies as a desert. Every square foot of field in the Imperial Valley has to be irrigated with six-and-half-feet of water to produce crops.

That water is essential, and it is imported—sucked out of a river that is itself increasingly dehydrated. And, the water is cheap. The price for farmers is a flat rate: \$19 per acre-foot. That's \$19 for enough water to cover a one-acre field in one foot of water—\$19 for 325,851 gallons.

The average home in the U.S. pays \$3.24 for 1,000 gallons of water.

The average home in Las Vegas pays \$2.71 for 1,000 gallons of water.

A farmer in the Imperial Valley pays six cents for 1,000 gallons of water.

And here's the really astonishing thing: The farmer in the Imperial Valley is using exactly the same water as the mother giving her daughter a bath in Las Vegas. The mother is just paying 45 times as much as the farmer.

A carrot farmer in the Imperial Valley can get 30,000 pounds of carrots from an acre of land. Those carrots will use about \$127 worth of water to grow. What that means in the grocery store is that the big, three-pound bag of carrots from California required an astonishing 217 gallons of water to grow—and that water cost one penny.

We need affordable carrots, we need farmers, and farmers need huge quantities of water. But why does the water that costs a California farmer \$1 cost a Las Vegas homeowner \$45?

Both the Imperial Valley and Las Vegas have huge economic impacts. The water siphoned off to the Imperial Valley generates crops and cattle worth \$1.5 billion. The water piped into Las Vegas generates gambling revenue alone of \$8.8 billion—not accounting for all the related economic activity, from grocery stores to movie theaters. In terms of bang for the bucket, the water we're using in Las Vegas is having a geometrically larger impact than the water in the Imperial Valley—per gallon, it's generating 24 times more economic activity.

Once you start to unpack the economics of the way water is used in Las Vegas and in the Imperial Valley—what the water costs and what it helps produce—Las Vegas doesn't look quite so sinful.

But the really important thing to understand is that Las Vegas casinos and Imperial Valley carrot fields both represent judgments—choices about economic development, water, and water economics. There is nothing wrong with deciding that casinos can afford more expensive water than carrot farmers—as long as we realize that's a decision we've made.

If we doubled the cost of water to the Imperial Valley farmers—which would surely occasion outrage—the water in the three-pound bag of carrots would cost just over two pennies. And the farmers would still be getting water at 1/20th the cost to the casinos.

Here's the real reason the economics of water are skewed: the prices the farmer and the casino owner pay for water aren't prices in the way we think of them. Water prices aren't fixed in the market—by people who need water being matched against the supply of water. The price of water for both farmers and Las Vegans is simply the cost to deliver the water to each, and nothing more. That's the sense in which the water itself is free.

But free water has a cost, and not a trivial cost.

People have no incentive to pay the slightest attention to what water they use or how they use it—because whether they are farmers flood-irrigating fields in India, or wealthy people filling swimming pools in Sydney, the price of the water is zero, or close to it. So, in that sense, it doesn't matter how much they use or what the productivity of the water itself is.

The culture of universally cheap water means that water systems worldwide rarely charge enough to sustain themselves—in Delhi or Washington, DC. In Delhi, 22 million residents only get water service an hour or two a day—that's all the utility can manage (and perhaps 6 million of those people have no water service at all). In Washington, the antiquated water system is being modernized on a schedule that has the overhaul completed in 100 years, a dramatic improvement over the original plan to update it over 300 years.

## People have no incentive to pay the slightest attention to what water they use or how they use it.

Water systems perform worse and worse over time, which not only erodes confidence in the water, it creates resistance to the very price hikes that would help solve the problem.

Why pay more for something that works so badly?

That, in fact, may be the ultimate irony: keeping water at, or near, free eventually ends up depriving people of the water that the free water is supposed to make available. Free water means there isn't enough revenue to keep the water flowing.

How did we come to expect water to be inexpensive—and to be so touchy about our water bills?

As a species, as a culture, we are used to finding the water we need and using it.

It's not so much that we're price-sensitive—it's almost the inverse. We think pricing water would be wrong. Water is one of the very few things that we don't think should be distributed based on the ability to pay for it. If you put a price on water, by implication, there will be someone who can't afford the price, and so won't get water. Clearly, that's inhuman—in Indianapolis or India.

Actually there's nothing unethical about managing water demand with price, and there's nothing immoral about allowing the market to help allocate water—so long as we solve what might be called the “first glass” problem, so long as everyone has access to water for their basic needs at the lowest possible cost. Beyond that, a little application of the market might help us use water more wisely, more equitably, keep water cleaner, and leave some for nature herself.

After 10,000 years of organized human civilization, it is time, at last, for an economics of water.

The last 100 years of human society have in fact been an unusual period with regard to people and water: if you lived in the developed world, not having to think at all about where your water would come from was a whole new human experience.

But that era is over. Many areas that have never experienced water scarcity—from Australia to Atlanta—are being hit with dramatic reductions in natural water availability. Growth in population, millions of people moving into the middle class around the world, and the spreading of factories to developing countries all put additional demands on water supplies. And economic improvement carries a dramatic hidden water tax. The typical American uses about 100 gallons of real water a day, the electricity the typical American uses at home requires 250 gallons a day, and an ordinary American's diet requires 500 gallons a day to produce. As more people rise into the middle class, their unseen, but very real, water needs increase in the same way.

One of the most striking changes in our relationship to water in the next hundred years will be that we will start using the right water for the right purpose. We won't use purified drinking water to flush our toilets and water our lawns. We won't hesitate to tap the most readily available source of water for most cities—our own wastewater. And that layering of water uses dovetails perfectly with a new kind of economic framework for water: different waters, different prices.

## After 10,000 years of organized human civilization, it is time, at last, for an economics of water.

The most basic ration of water for all of us will be low-price. Beyond that, there will be tiers of water with all kinds of qualities—the cleanliness of the water, the quantity available, the reliability or security of the supply in times of drought—and those qualities will all come with prices.

The result should be a richer appreciation of the value, the uses, and the costs of water. It should also mean a water system that makes more sense, and that generates the money necessary to sustain and improve itself.

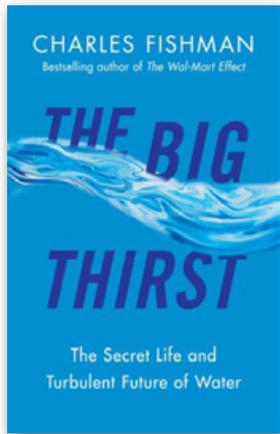
None of that flies in the face of the idea of water as a basic human right—pricing water doesn't require further squeezing people in developing nations who don't have good water access now. In fact, poor people around the world pay a terrible daily price for their water today, a far higher price than the \$35 a month our water costs us. That price is the billions of people in the world's developing nations who give up education, or the possibility of employment, just to stand in line for hours a week, or walk for hours a day, to get their water; it's poor people whose children are dying at a rate of 100 kids an hour from diseases they catch from tainted water.

That water is “free” only in the most pinched sense; in fact, water you have to walk for, water you have to stand in line for, is the opposite of free—it’s a kind of water bondage that desiccates the whole rest of your life.

An economics of water should be liberating—for people and for water itself. It doesn’t mean turning water supplies or water infrastructure over to remote, self-interested, profit-driven corporations. It means putting not just a price, but a value, on the most important substance in our daily lives, and putting a price, and a value, on the work necessary to make sure that substance is available in the quantity and quality that sustains the kind of communities we want to have.

Price is incredibly potent. Indeed, if you had to pick one thing to fix about water, one thing that would help you fix everything else—scarcity, unequal distribution, misuse, waste, skewed priorities, resistance to re-use, short-sighted exploitation of natural water resources—that one thing is price.

**The right price changes how we see everything else about water. 📖**



## BUY THE BOOK

Get more details or buy a copy of Charles Fishman's [\*The Big Thirst\*](#).

## ABOUT THE AUTHOR

Charles Fishman is the author of *The Wal-Mart Effect*, a *New York Times*, *Wall Street Journal*, and *Business Week* bestseller, as well as a finalist for the Financial Times and Goldman Sachs Business Book of the Year award in 2006. Fishman is a former metro and national reporter for *The Washington Post*. Since 1996, he has worked for the innovative business magazine *Fast Company*. He has won numerous awards, including three times winning UCLA's Gerald Loeb Award for outstanding business writing—the most prestigious award in business journalism—most recently for his story about bottled water, “Message in a Bottle.” He currently lives just outside Philadelphia with his wife, two kids, and two labrador retrievers. To learn more about his new book, *The Big Thirst*, visit [www.thebigthirst.com](http://www.thebigthirst.com). You can reach Fishman at [cnfish@mindspring.com](mailto:cnfish@mindspring.com).

## SEND THIS

[Pass along a copy](#) of this manifesto to others.

## SUBSCRIBE

[Sign up for our free e-newsletter](#) to learn about our latest manifestos as soon as they are available.

## BORN ON DATE

This document was created on April 6, 2011 and is based on the best information available at that time.

## ABOUT CHANGETHIS

[ChangeThis](#) is a vehicle, not a publisher. We make it easy for big ideas to spread. While the authors we work with are responsible for their own work, they don't necessarily agree with everything available in ChangeThis format. But you knew that already.

ChangeThis is supported by the love and tender care of 800-CEO-READ. Visit us at [800-CEO-READ](http://800-CEO-READ) or at our daily [blog](#).

## COPYRIGHT INFO

The copyright of this work belongs to the author, who is solely responsible for the content.

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs License. To view a copy of this license, visit [Creative Commons](http://creativecommons.org/licenses/by-nc-nd/3.0/) or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.

Cover image from [iStockphoto](#)®

## WHAT YOU CAN DO

You are given the unlimited right to print this manifesto and to distribute it electronically (via email, your website, or any other means). You can print out pages and put them in your favorite coffee shop's windows or your doctor's waiting room. You can transcribe the author's words onto the sidewalk, or you can hand out copies to everyone you meet. You may not alter this manifesto in any way, though, and you may not charge for it.