

BLUEWASHING



**Why the Bottled
Water Industry's
EcoFriendly Claims
Don't Hold Water**

food&waterwatch





About Food & Water Watch

Food & Water Watch is a non-profit organization working with grassroots organizations around the world to create an economically and environmentally viable future. Through research, public and policymaker education, media and lobbying, we advocate policies that guarantee safe, wholesome food produced in a humane and sustainable manner and public, rather than private, control of water resources including oceans, rivers and groundwater. For more information, visit www.foodandwaterwatch.org.

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Executive Summary

Corporations have a financial incentive to hide their environmental impacts from an American public that wants to buy environmentally friendly products. As consumers have been looking for ways to “go green,” corporations have been accused of “greenwashing” — selling products as environmentally responsible when they actually damage the environment. Today, with heightened media attention on the world water crisis, blue is the new green — and corporations appear to be using similar “bluwashing” tactics to obscure their effect on the world’s water.

The bottled water industry is a prime example of a corporate sector that is using these misleading marketing tactics to sell its products. In 2008, bottled water sales declined for the first time in years, partially due to the economy, but also largely due to growing awareness about the social and environmental impacts of the product. The industry’s largest players, including Nestlé Waters North America, The Coca-Cola Company and PepsiCo appear to be responding by trying to sell bottled water as an environmentally friendly product — despite its damage to water systems and the environment in general.

For example, the major bottling companies are using World Water Day to advertise their contributions to water charities in developing countries and to highlight the steps they are taking to make their manufacturing more water-efficient. Yet bottled water is inherently not a water-friendly product. Bottling companies take water out of local water systems and ship it elsewhere — which is one reason that many residents worried about their local water have opposed water bottlers in their communities. Manufacturing the product also requires additional water. And no matter how much water bottlers talk about the steps they are taking to reduce their water footprint, as long as water generates profit, bottlers will never have incentive to reduce overall water consumption.

The industry is trying hard to recover from the bad reputation it obtained from using large quantities of oil, creating pollution through plastic production and transportation, and generating mountains of landfill waste. Today, bottlers are advertising thinner plastic or plastic partially made from plants and trumpeting their commitment to recycling projects. Nestlé even commissioned what it claims is the first comprehensive peer-reviewed study of the environmental impacts of packaged beverages, showing that bottled water has the lowest water and carbon footprint, and that Nestlé’s new bottles have the smallest footprints compared to other water bottlers. Yet even Nestlé’s own study found that tap water has an even lower carbon footprint. And tap water does not use plastic at all.

All of these attempts to sell packaged water encourage consumers to ignore the most environmentally responsible choice: the tap. Many Americans do not realize that as bottled water sales have steadily increased, the federal funding their communities need to keep tap water safe has systematically declined. The federal government can reverse this trend by providing steady funding for water infrastructure through a Clean Water Trust Fund and ensuring tap water remains a sustainable, safe and affordable source of water.

Key Facts

- For every liter of water that goes into a bottle, two liters of water are used to make the plastic bottles and bottle the water.
- Spring water used for bottled water comes from environmentally sensitive areas.
- Groundwater pumping can cause water levels to decline both underground and in surrounding lakes, rivers and streams.
- As long as water bottlers profit from water, they have no financial incentive to reduce their total water consumption.
- Tap water has the lowest water footprint and the lowest carbon footprint of any beverage.
- In 2007, bottled water production in the United States used the energy equivalent of 32 to 54 million barrels of oil — enough to fuel about 1.5 million cars for a year.
- The manufacture of polyethylene terephthalate (PET) bottles, water extraction, bottling and distribution amounts to up to 2,000 times the energy cost of producing tap water.
- In 2006, only one out of every four water bottles were recycled; at this rate, millions of tons of empty plastic bottles end up in landfills.
- The distribution of bottled water uses energy and therefore contributes to climate change.



The bottled water industry is a prime example of a corporate sector that is using misleading tactics to continue selling its products. Today, the industry's attempts to sell itself as environmentally friendly obscure the real effects of the product and distract consumers from the most responsible source of water there is: the tap.



Introduction: Blue Is the New Green

American consumers see green everywhere these days: green cars, green light bulbs, green homes, green technology — even a green television network. As the global media has brought growing awareness about the risks of climate change and other environmental issues, most Americans have been bombarded with numerous opportunities for saving energy and the environment by buying green products.

While some products may genuinely be environmentally friendly, some companies appear to be attempting to profit from consumer concerns without actually benefitting the environment. In fact, since a bad image can damage sales, the world's major multinational corporations have a financial incentive to distract consumers from the true impacts of their buying decisions. With all the hype about "going green" many companies have been accused of "greenwashing" — selling their products as environmentally friendly even though they may actually be environmentally damaging.

Today, as the global media has turned its attention to the issue of water scarcity, blue is the new green — and

human rights activists fighting for universal access to safe water see similar "bluewashing." Almost every major multinational corporation has something to say about what it is doing to protect the world's water, despite the role that those same companies may play in damaging the essential resource.

The bottled water industry is a prime example of a corporate sector that is using misleading tactics to continue selling its products. Today, the industry's attempts to sell itself as environmentally friendly obscure the real effects of the product and distract consumers from the most responsible source of water there is: the tap.

Bottled Water Sales Are Declining

The bottled water industry has spent millions of dollars trying to convince the American public that water in a plastic bottle is the ideal source of drinking water. Nestlé's Ice Mountain natural spring water brands itself "Pure as the driven snow!" while its Poland Spring water brand says it "Just may be the best tasting water on earth!" and the label on Pepsi's Aquafina brand describes the contents as "Pure Water. Perfect Taste."

Historically, such efforts appear to have paid off. The industry's revenues in the United States grew from \$4 billion in 1997 to more than \$11 billion in 2007, and the per-capita consumption increased from 13.5 gallons in 1997 to 29 gallons in 2007, before a slight decline to 28.5 gallons in 2008.¹ This drop was significant, as per-capita consumption of bottled water has increased every year since 1976 until 2008.² It is now the second-largest beverage market in the country after carbonated soft drinks.³

Today, this trend appears to be changing. The Beverage Marketing Corporation's data recorded a "significant change" from previous years in 2008, as bottled water sales went down.⁴ This drop continued in 2009 for Nestlé

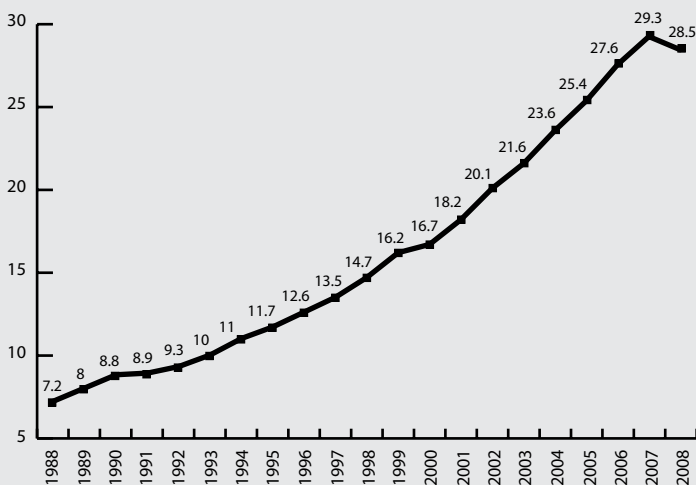
Waters North America, the country's biggest water bottler, as recorded sales from bottled water dropped 1.4 percent.⁵

The change was likely due in part to the downturn in the economy, as consumers scaled back on overall buying.⁶ For cash-strapped consumers, it makes more sense to drink tap water, which costs between \$0.002 and \$0.003 per gallon, rather than the typical bottled water brands, which cost hundreds to thousands of times that amount.⁷

But that is not the whole story. The Washington Post, National Public Radio and the Beverage Marketing Corporation itself reported that the drop in sales is probably also due to a growing awareness of the social and environmental impacts of the product⁸ — aspects of bottled water that the companies are not likely to advertise.

The bottled water industry has a great deal of money at stake in convincing the American public to keep buying its product despite the social and environmental impacts. This is probably why the industry's largest players are trying hard to present themselves as responsible with water resources, despite the real implications of their product.

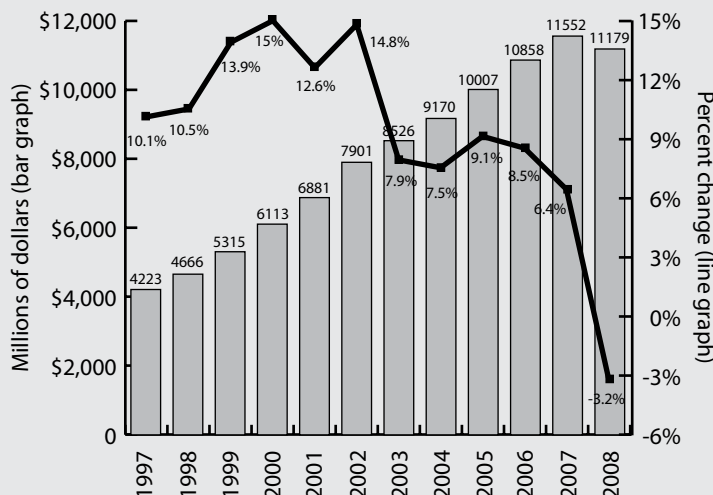
U.S. Gallons of Bottled Water Consumed Per Capita, 1988-2008



1988-2007 data from: Beverage World. "State of the Industry '08 Bottled Water Report." April 2008 at S13.

2008 data from: Beverage Marketing Corporation. [Press Release] "Bottled Water Perseveres in a Difficult Year, New Data from Beverage Marketing Corporation Show." April 20, 2009.

U.S. Bottled Water Sales and Industry Growth



1997-2006 data from: Beverage World. "State of the Industry '08 Bottled Water Report." April 2008 at S13.

2007-2008 data from: Beverage Marketing Corporation. [Press Release] "Bottled Water Perseveres in a Difficult Year, New Data from Beverage Marketing Corporation Show." April 20, 2009.

Bluwashing the Bottled Water Industry

The United Nations established March 22 as World Water Day to bring international attention to global water problems, but the event has become hijacked by bottled water companies.

The International Bottled Water Association in its press release titled “World Water Day: Where Bottled Water Fits In” said that “Bottled water is a healthy beverage that is produced by an industry with an outstanding tradition of environmental stewardship, protection and sustainability.”⁹ The American Beverage Association, with members such as The Coca-Cola Company, PepsiCo and Nestlé Waters North America, said it “commends World Water Day and efforts to improve water resources and sanitation throughout the world.”¹⁰ Nestlé Waters North America issued its own statement “Supporting World Water Day and Beyond.”¹¹

These companies cite their donations to water charities or efforts to reduce the amount of water that they use in their production as evidence of the leadership role that they are playing in addressing the world water crisis. Yet these activities serve as a distraction from the water problems associated with the product — a prime example of corporate bluwashing.

The statements that bottled water companies make about supporting water stewardship blatantly ignore the fact that bottled water is inherently water-intensive. The 8.7 billion gallons of water that were sold in 2008¹² were taken from the environment, packaged in plastic and transported, often for very long distances.

This concern relates especially to spring water, which often comes from groundwater connected to environmentally sensitive sources of water.¹³ Groundwater pumping is a concern in general because groundwater is connected to the rest of the surface water system.¹⁴ When water is pulled out of the ground faster than it is naturally replaced, the entire surrounding watershed loses water.¹⁵ When the water levels decline underground it can also affect the flow levels of local rivers, streams, lakes and wetlands.¹⁶

Many concerned citizens around the United States, including community groups in New Hampshire and California, have opposed water bottlers coming to their communities to prevent damage to their watersheds.¹⁷ Residents of Mecosta County, Michigan, actually took Nestlé to court with evidence that water levels in the streams surrounding its plant had dropped since it began to operate.¹⁸



In addition to the water that ends up in the bottle, water is used during the manufacturing of the product. The Pacific Institute estimated that in 2006, for each liter of water that went into a PET bottle, two liters of water were used to make the plastic bottles and bottle the water.¹⁹ Given that the industry sold 8.7 billion gallons worth of bottled water in the United States in 2008, water bottlers used an estimated 26 billion gallons of water in the production and bottling of the product.²⁰

The bottled water industry claims to be addressing this problem through its water footprinting efforts — identifying how much water it uses and implementing measures to reduce that amount. In December 2009, representatives of PepsiCo, The Coca-Cola Company and Nestlé Waters North America participated in a Corporate Water Footprinting Conference to “showcase the companies leading the way in freshwater management and reduction.”²¹

Yet these efforts ignore the fact that as long as these companies are profiting from water itself, they will never have incentive to reduce overall water use. For example, Nestlé

Waters North America reports that it uses 1.37 gallons of water for every gallon of bottled water it produces, and used a total of approximately 4 billion gallons in 2007.²² In 2007, it reduced the amount of water it used in its manufacturing process by 1.3 percent — but it also increased the volume of bottled water that it produced by 10 percent.²³ Between 2006 and 2007, Nestlé Waters North America's water-use intensity decreased from 1.38 to 1.37 liters per liter — but it still used 363 million more gallons of water in 2007 than it used in 2006.²⁴ So even though the manufacturing was more water-efficient, the overall quantity of water the company used actually increased.

The Coca-Cola Company's plans to reduce its water footprint are also unlikely to make a significant impact. Water is the main ingredient in all of Coca-Cola's beverages, yet in 2007, Coca-Cola declared that it was going to go "water neutral."²⁵ According to the definition of water neutrality developed by The Coca-Cola Company, World Wildlife Fund, Twente University, World Business Council for Sustainable Development, Water Neutral/Emvelo Group and UNESCO-IHE, the company would measure its

water footprint, take steps to reduce it and make up for the water it uses in one location by making water improvements elsewhere.²⁶

Water neutrality is a fundamentally problematic concept because the value of water is not the same in all contexts.²⁷ Drawing water from a water-scarce region has a greater impact than the same amount of water being extracted from a water-rich region.²⁸ Also, water — whether it is groundwater or surface water — is a local resource that is part of a watershed. Reducing the quantity of water taken from another watershed will do nothing to compensate for the loss to the original watershed.

In their technical definition, Coca-Cola and its partners defined water neutrality not as reducing the footprint to zero, but rather as doing everything "reasonably possible" to reduce its water footprint and making a "reasonable investment" in making up for the residual footprint.²⁹ However, as long as the term "reasonable" is open to the corporation's interpretation, its claims of going water neutral are unlikely to significantly modify its overall water use.



Greenwashing the Bottled Water Industry

Water use is not the only environmental problem that the bottled water industry has incentive to cover up. In addition to being water-intensive, the bottled water industry is energy-intensive and produces a lot of waste. A peer-reviewed Pacific Institute study estimates that bottled water production in the United States used the energy equivalent of 32 to 54 million barrels of oil in 2007 — enough to fuel about 1.5 million cars for a year.³⁰ This report estimated that the manufacture of polyethylene terephthalate (PET) bottles, water extraction, bottling and distribution amounted to up to 2,000 times the energy cost of producing tap water.³¹

The bottled water industry demands petroleum and energy to produce the tens of billions of plastic bottles used in the United States each year. In 2006, only one out of every four water bottles were recycled.³² At this rate, millions of tons of empty plastic bottles end up in landfills. In a recent report, the U.S. Government Accountability Office quoted waste industry experts who claimed that for the purpose of landfill management, these bottles will "never decompose."³³ Finally, a significant amount of energy is used in the transport of bottled water products.³⁴ This can cause more pollution and contribute to global warming.

The industry is well aware that these environmental impacts are a consumer concern and is trying hard to green its image. In February 2010, the same month it reported that the bottled water sector was the company's only sector to show a decline in 2009 sales, Nestlé Waters North America advertised the results of a peer-reviewed study it had commissioned on the water and environmental footprints of packaged beverages.³⁵ Its press release advertises that bottled water has the lightest environmental footprint among packaged beverages, and that Nestlé's EcoShape bottle has the lightest of all bottled waters.³⁶ These are not surprising conclusions considering that Nestlé funded the study. Yet the conclusions touted in Nestlé's press release distract the public from the study's own finding: Tap water has the smallest water and carbon footprint of all.³⁷

Nestlé's study is not the only misleading industry response to criticism of the plastic waste it generates. The industry is also trying to green its image by championing recycling efforts and advertising new, more environmentally friendly bottles. The International Bottled Water Association participates in America Recycles Day.³⁸ Nestlé Waters North America is participating on the American Beverage Association's Recycling Task Force.³⁹ The American Beverage Association partnered with the U.S. Environmental Protection Agency to create the National Recycling Partnership, which is "dedicated to revitalizing recycling in America."⁴⁰

In addition, the International Bottled Water Association sent a press release to the media stating that the weight of bottled water containers has decreased 32.6 percent, saving 1.3 billion pounds of plastic resin.⁴¹ This is likely a result of a trend in many bottled water companies, including Nestlé, PepsiCo and Coca-Cola, "lightweighting" their bottles.⁴² Coca-Cola has gone a step further and is publicizing its new "PlantBottle," which partially replaces a petroleum-based ingredient with a plant-based one in the plastic manufacturing process.⁴³

Coca-Cola Company's new PlantBottle is not as environmentally friendly as it sounds. Although the bottles are partially made from materials that came from plants, they are still made of PET (polyethylene terephthalate) plastic generated through a chemical manufacturing process, just like traditional bottles. The difference between the PlantBottle and a normal bottle is that one of the chemical components initially used to create the chemical comes from processing sugar cane rather than petroleum.⁴⁴

Coca-Cola says its goal in using plant-based plastic is to reduce its dependence on non-renewable resources such as oil.⁴⁵ But plastics that use plant-based materials in the

Donations to Water Charities

Major water bottlers are eager to boost their water friendly image by advertising the amount of money they give to water charities. There is great need to address the world's water problems. Today, 2.6 billion people live in households without proper means of sanitation and 1.1 billion people do not have access to improved drinking water.⁶² According to the World Health Organization and UNICEF, it would take an investment of \$11.3 billion per year to achieve the most basic of the United Nations' Millennium Development Goals for worldwide safe water and sanitation.⁶³

In 2009, Nestlé Waters North America advertised the 1.5 million Swiss francs (about \$1.4 million) it donated to Red Cross Water and Sanitation programs, and its support for Project WET (Water Education for Teachers), a water education publisher.⁶⁴ The Coca-Cola Foundation advertises its \$20 million multi-year partnership with the World Wildlife Fund to improve the watersheds of several key rivers throughout the world.⁶⁵ In 2008, PepsiCo said it had committed more than \$15 million to water projects in developing countries since 2005.⁶⁶ It also partnered with Starbucks to sell a brand of water called Ethos Water.⁶⁷ Starbucks contributes 5 cents from every bottle sold to its Ethos Water Fund, which gives grants to water programs in developing countries.⁶⁸

These donations sound a bit less impressive when put in the context of how much money these companies make from their sales. In 2007, for example, Nestlé Waters North America took in \$3.8 billion in revenues⁶⁹ and spent \$2.6 million giving to charities⁷⁰ — only 0.07 percent of the money they took in from selling the product. If Pepsi gave \$15 million over 3 years, that amounts to only about \$5 million per year, for all its brands of water, carbonated soft drinks, juices, coffees, teas and energy drinks — only about 0.01 percent of the 43 billion dollars⁷¹ the company grossed overall in 2008. Pepsi's Aquafina brand alone took in \$1.3 billion in revenues in 2008.⁷² And if Starbucks donates 5 cents per bottle for every bottle of Ethos Water it sells for \$1.80 a bottle, it would make \$360 million in revenues by the time it reaches its goal of raising \$10 million for water projects.⁷³

The amount of money that these companies donate to water charities pales in comparison to the amount of money that they use for the rest of their operations. More importantly, these donations do not address the specific impacts that the bottled water industry has on local water resources.

CEO Water Mandate

The same companies that have declared their commitment to World Water Day have also signed on to the CEO Water Mandate — a program led by the United Nations that has been criticized as a lot of talk and little action. Coca-Cola, Nestlé and Pepsi have all signed on to the voluntary partnership between companies and the United Nations as part of the United Nations Global Compact, which encourages the world's major multinational corporations to adhere to principles of social responsibility when it comes to human rights and the environment.⁷⁴ The CEO Water Mandate specifically urges companies to publicize their records when it comes to water and work to reduce their impact on the world's water resources.

But like the Global Compact itself, the CEO Water Mandate has been criticized for falling short of its goals. Critics of the program see the CEO Water Mandate as “a prime example of an international institution helping corporations greenwash socially and environmentally damaging practices.”⁷⁵ Since the agreements that companies make are not binding, companies can join without necessarily changing their behavior.⁷⁶ In 2010, the CEO Water Mandate received a greenwashing award from the organizers of The Public Eye Awards, an annual event in Davos, Switzerland, organized to coincide with the World Economic Forum to shame corporate players for environmentally damaging practices.⁷⁷

Selling Water to Kids

Today, the bottled water industry is jumping on another hot media topic to paint a more positive image of itself: the childhood obesity epidemic. With soda getting a bad rap for its contributions to childhood obesity, the bottled water industry is advertising itself as a healthy alternative. A Research and Markets report published in 2009 cites “ethical and health credentials” as “future opportunities in bottled water.”⁷⁸ Nestlé Waters North America funds studies to identify the health effects of water, and it is even specifically packaging its water in a special 11-ounce “Aquapod” that is designed to appeal to children.⁷⁹

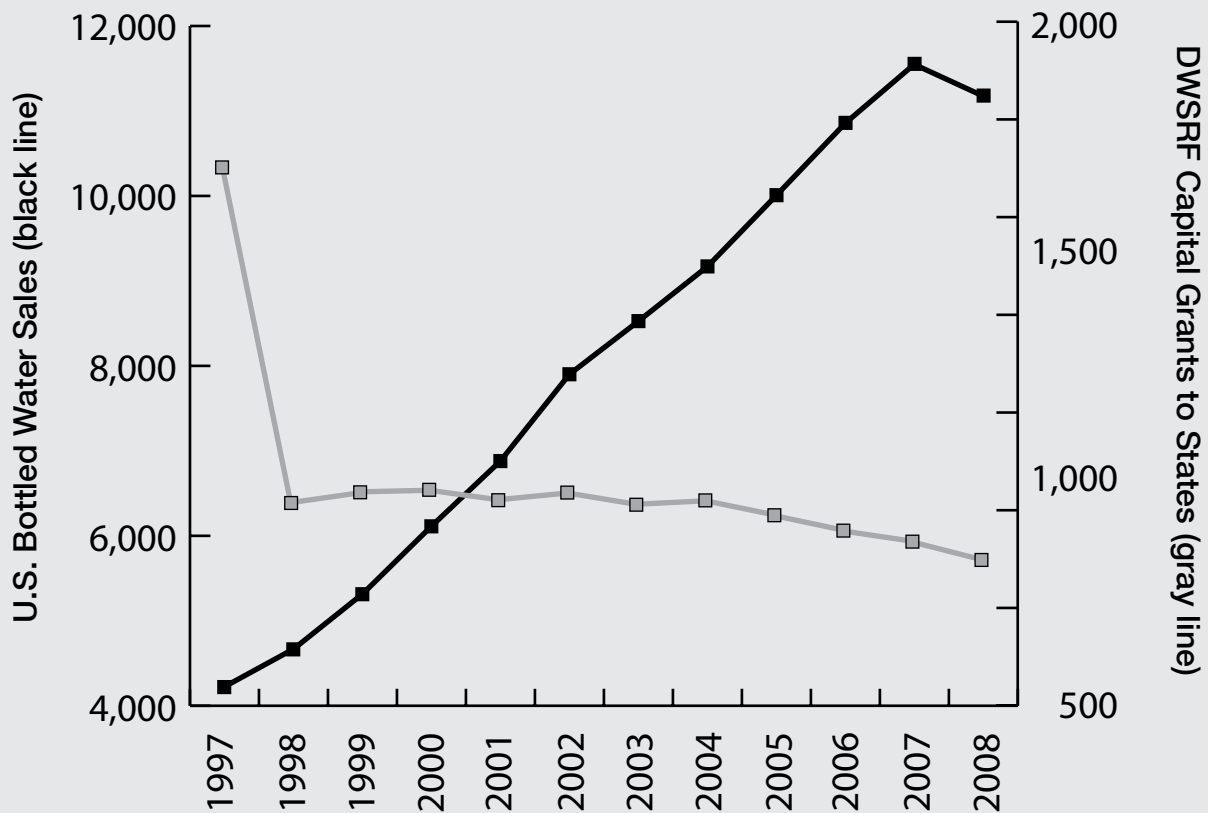
If anything, teaching kids to drink bottled water is actually teaching them to make a less environmentally responsible choice. Tap water is also water — and has the same health benefits associated with water. In fact, the New York Times reported that a new study showed that adding school water fountains can lower a child's risk for becoming overweight.⁸⁰

manufacturing process come with new challenges. They have a shorter shelf life and do not hold carbonation as well as traditional petroleum-based products.⁴⁶ This may explain why Coca-Cola's new PlantBottles are only 30 percent plant-based.⁴⁷ Furthermore, Coca-Cola is “currently sourcing raw materials for its PlantBottle from suppliers in Brazil,” where the sugar cane industry has been criticized for contributing to deforestation of the rain forest.⁴⁸ Sugar is a water-intensive crop, and its production can contribute to water pollution.⁴⁹

No matter how light the bottle or what the plastic is made out of, it is still a plastic bottle that needs to be disposed of. In its press release, Coca-Cola advertises that PlantBottles are 100 percent recyclable — implying that there is an additional benefit from plant-based bottles.⁵⁰ However, Nestlé also says that its bottles which are not made out of plants are 100 percent recyclable.⁵¹ In fact, all PET bottles are recyclable. The problem is, three out of every four bottles still end up in the trash.⁵²



U.S. Bottled Water Sales Versus Federal Drinking Water State Revolving Funds Available for States, 1997-2008 (in Millions of Dollars)



DWSRF Funding data from: U.S. Environmental Protection Agency. Office of Water. "Drinking Water State Revolving Fund Allotments." 1997-2008.

Adjusted for inflation using: Sahr, Robert C. "Inflation conversion factors for years 1774 to estimated 2019." Oregon State University, Political Science Department. January 16, 2009.

Attack on the Tap

The International Bottled Water Association is quick to point out that the bottled water industry uses less water than many other industries, such as agriculture.⁵³ Nestlé points out that soda and beer both take more water to produce than bottled water does.⁵⁴ These arguments are true, but do not make bottled water a water-friendly product. Water is a necessary resource in the production of every food or beverage. But unlike other such products, it can just as well come out of the tap.

When the majority of American consumers have access to safe tap water, bottled water is not an essential product. All the efforts of the bottled water industry to sell itself as environmentally friendly ignore the fact that as long as water is sold in plastic bottles and shipped around the world, the industry will continue to use water, consume energy and generate waste. The best way to avoid these

impacts is to drink tap water, which has a lower water footprint than bottled water, a lower carbon footprint than bottled water, and does not use plastic packaging at all.

Yet the bottled water industry's attempts to sell packaged water appear to have had side effects not just on the environment at large, but also on the country's public drinking water supplies. As the bottled water industry sells its water as the ideal, clean source of drinking water, many consumers are influenced to think that bottled water is safer or cleaner than the tap — even though studies have shown that bottled water has contamination problems, and the government standards for tap water in the United States are actually more stringent than those for bottled water.⁵⁵

Messaging from the industry has likely contributed to a decline in consumer confidence in the tap, which means less support for public drinking water. In fact, in the last

10 years, while bottled water sales steadily increased, citing many years with double-digit growth in sales,⁵⁶ the federal funding for water infrastructure declined to a historic low in 2008, when adjusted for inflation.⁵⁷ Poorly funded water systems can further compromise public confidence in drinking water.

Conclusion

Many American consumers are seeing through the industry's marketing tactics and joining a nationwide movement to stop drinking bottled water and take back the tap. According to the College Sustainability Report Card, 23 college campuses had a disposable water bottle ban in effect as of February 2010.⁵⁸ The U.S. Conference of Mayors passed a resolution in 2007 stating the importance of municipal water, and another resolution in 2008 encouraging mayors to phase out government use of bottled water.⁵⁹ A growing number of municipalities have banned government spending on bottled water, including Los Angeles, San Francisco and New York City.⁶⁰ Event planners have begun hosting bottled water free events, and restaurants, starting in San Francisco, have stopped selling bottled water.⁶¹

As more and more people are turning their attention back to the tap, it is not enough to simply stop buying bottled water — the public must also invest in public water infrastructure so that tap water remains a safe, affordable source of environmentally sustainable drinking water. A federal Clean Water Trust Fund would accomplish this goal by providing a dedicated and steady source of funding for public water infrastructure that would allow municipalities and states to make the necessary repairs and upgrades to their water systems to ensure clean affordable water for all.

Endnotes

- 1 Rodwan, John. "Confronting Challenges: U.S. and International Bottled Water Developments and Statistics for 2008." *Bottled Water Reporter*. April/May 2009 at 13.
- 2 "State of the Industry '07" Beverage World. April 2007 at S16.
- 3 Rodwan, John. "Confronting Challenges: U.S. and International Bottled Water Developments and Statistics for 2008." *Bottled Water Reporter*. April/May 2009 at 12.
- 4 Rodwan, John. "Confronting Challenges: U.S. and International Bottled Water Developments and Statistics for 2008." *Bottled Water Reporter*. April/May 2009 at 13.
- 5 Steele, Francesca. "Nestlé profits dampened by falling mineral water sales." *The Times Online*. (United Kingdom). Feb 19, 2010.
- 6 Mui, Yan. "Bottled Water Boom Appears Tapped Out." *The Washington Post*. August 13, 2009.
- 7 Office of Water. U.S. Environmental Protection Agency. "Water on Tap: what you need to know." (EPA 816-K-03-007). October 2003; NUS Consulting Group. "2007-2008 International Water Report & Cost Survey." July 2008; Food & Water Watch purchased five single-serve bottles of water in August/September 2009 from a Washington, D.C.

- 7-Eleven, CVS Pharmacy, Giant, Safeway and Whole Foods Market. The cost, excluding sales tax, totaled \$5.77 for 97.4 ounces, which works out to \$7.58 per gallon.
- 8 Mui, Yan. "Bottled Water Boom Appears Tapped Out." *The Washington Post*. August 13, 2009; Cohen, Nancy. "Bottled Water Sales Flatten During Recession." *National Public Radio*. April 15, 2009; Rodwan, John. "Confronting Challenges: U.S. and International Bottled Water Developments and Statistics for 2008." *Bottled Water Reporter*. April/May 2009.
- 9 International Bottled Water Association. "World Water Day: Where Bottled Water Fits In." March 19, 2008.
- 10 American Beverage Association. [Press Release] "American Beverage Association Celebrates World Water Day." March 20, 2008.
- 11 Nestlé Waters North America. [Press Release] "Supporting Water: World Water Day and Beyond." March 19, 2009.
- 12 Rodwan, John. "Confronting Challenges: U.S. and International Bottled Water Developments and Statistics for 2008." *Bottled Water Reporter*. April/May 2009 at 13.
- 13 Hyndman, David. Associate Professor, Michigan State University. Testimony on "Assessing the Environmental Risks of the Water Bottling Industry's Extraction of Groundwater". Subcommittee on Domestic Policy, Committee on Oversight and Government Reform. December 12, 2007.
- 14 Alley, William et al. U.S. Department of the Interior. U.S. Geological Survey. "Sustainability of Ground-Water Resources." (Circular 1186). 1999 at 6-11.
- 15 Alley, William et al. U.S. Department of the Interior. U.S. Geological Survey. "Sustainability of Ground-Water Resources." (Circular 1186). 1999 at 22.
- 16 Alley, William et al. U.S. Department of the Interior. U.S. Geological Survey. "Sustainability of Ground-Water Resources." (Circular 1186). 1999 at 30-35.
- 17 McCloud Watershed Council. "The Nestle Project." Available at www.mccloudwatershedcouncil.org/nestle/index.html. Save Our Groundwater. "About Us." Available at <http://www.saveourgroundwater.org/>
- 18 See Food and Water Watch. "All Bottled Up: Nestlé's Pursuit of Community Water." January 2009 at 12-13.
- 19 Pacific Institute. "Bottled Water and Energy: A Factsheet." 2007.
- 20 Calculation: Total amount of water = amount bottled + 2 x amount bottled = 8.7 billion + 2 x 8.7 billion = 26.1 billion
- 21 Action for Sustainable America. [Website] Corporate Water Footprinting Conference. San Francisco, December 2-3, 2009. Available at <http://www.aseries.com/v8-12/Prospectus/Index.php?sEventCode=CW0912SANFRA NCISCO>
- 22 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 33. (15 billion liters = 4 billion gallons)
- 23 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 30.
- 24 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 33. Calculation: 15,298,089,000 - 13,923,596,000 liters = 1,374,493,000 liters = 363,102,637 U.S. gallons
- 25 Isdell, E. Chairman and CEO, The Coca Cola Company. Remarks at the WWF Annual Conference. June 5, 2007.
- 26 Business for Social Responsibility. "Drinking it in: The Evolution of a Global Water Stewardship Program at the Coca-Cola Company." March 2008 at 7; Koch, Greg et al. "Water Neutrality: a concept paper." November 20, 2007.
- 27 Business for Social Responsibility. "Drinking it in: The Evolution of a Global Water Stewardship Program at the Coca-Cola Company." March 2008 at 8.
- 28 Business for Social Responsibility. "Drinking it in: The Evolution of a Global Water Stewardship Program at the Coca-Cola Company." March 2008 at 7.
- 29 Business for Social Responsibility. "Drinking it in: The Evolution of a Global Water Stewardship Program at the Coca-Cola Company." March 2008 at 7.
- 30 Gleick, PH and HS Cooley. "Energy implications of bottled water." *Environmental Research Letters*, 4, 014009. 2009 at 6; U.S. Environmental Protection Agency, Office of Transportation and Air Quality. FWW Calculation based on data from "Emission Facts: Average Annual Emissions and Fuel Consumption for Passenger Cars and Light Trucks." EPA420-F-00-013. April 2000; "Frequently Asked Questions – Conversion Equivalents." U.S. Department of Energy. Energy Information Administration. Calculation: Avg barrels of oil used for bottled water = 54 million + 32 million divided by 2 = 43 million; 1 barrel of oil = 20 gallons of gasoline; 1 car uses 581 gallons of gasoline per year. 43 million barrels used by bottled water per year x 20 gallons of gasoline per barrel divided by 581 gallons per car per year = about 1.5 million cars per year

- 31 Gleick, PH and HS Cooley. "Energy implications of bottled water." *Environmental Research Letters*, 4, 014009. 2009 at 6.
- 32 U.S. Government Accountability Office. "Bottled Water: FDA Safety and Consumer Protections are Often Less Stringent than Comparable EPA Protections for Tap Water." June 2009 at 23.
- 33 U.S. Government Accountability Office. "Bottled Water: FDA Safety and Consumer Protections are Often Less Stringent than Comparable EPA Protections for Tap Water." June 2009 at 24.
- 34 Gleick, PH and HS Cooley. "Energy implications of bottled water." *Environmental Research Letters*, 4, 014009. 2009 at 4.
- 35 Nestlé Waters North America. [Press Release] "Bottled Water Shown to Have Lightest Environmental Footprint among Packaged Drinks, New Study Finds." February 4, 2010; Quantis. "Project Report: Environmental Life Cycle Assessment of Drinking Water Alternatives and Consumer Beverage Consumption in North America." Published by Nestlé Waters North America. February 1, 2010 at 2.
- 36 Nestlé Waters North America. [Press Release] "Bottled Water Shown to Have Lightest Environmental Footprint among Packaged Drinks, New Study Finds." February 4, 2010.
- 37 Quantis. "Project Report: Environmental Life Cycle Assessment of Drinking Water Alternatives and Consumer Beverage Consumption in North America." Published by Nestlé Waters North America. February 1, 2010 at 4,5.
- 38 International Bottled Water Association. [Press Release] "IBWA Celebrates America Recycles Day and Encourages Greater Recycling of Bottled Water and all Containers." November 15, 2007.
- 39 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 37.
- 40 American Beverage Association. [Press Release] "American Beverage Association Celebrates World Water Day." March 20, 2008.
- 41 International Bottled Water Association. [Press Release] "Weight of PET Bottled Water Containers has Decreased 32.6% over Past Eight Years, Saving 1.3 Billion Lbs of Plastic Resin." February 18, 2010.
- 42 Bauerlein, Valerie. "Pepsi to Pare Plastic for Bottled Water." *The Wall Street Journal*. March 25, 2009.
- 43 The Coca Cola Company. [Press Release] "The Coca Cola Company Begins Global Launch of Innovative Plant Bottle." November 16, 2009.
- 44 The Coca Cola Company. [Press Release] "The Coca Cola Company Begins Global Launch of Innovative PlantBottle." November 16, 2009.
- 45 The Coca Cola Company. [Press Release] "The Coca Cola Company Begins Global Launch of Innovative PlantBottle." November 16, 2009.
- 46 Herring, Chris. "Coke's New Bottled is Part Plant." *The Wall Street Journal*. January 24, 2010.
- 47 The Coca Cola Company. [Press Release] "The Coca Cola Company Begins Global Launch of Innovative PlantBottle." November 16, 2009.
- 48 The Coca Cola Company. [Press Release] "The Coca Cola Company Begins Global Launch of Innovative PlantBottle." November 16, 2009; BBC News. "Brazil eyes Amazon sugar cane ban." September 18, 2009.
- 49 World Wildlife Fund. "Sugar and the Environment: Encouraging Better Management Practices in Sugar Production" at 4; Gunkel, Gunter et al. "Sugar Cane Industry as a Source of Water Pollution – Case Study on the Situation in Ipojuca River, Pernambuco, Brazil." *Water, Air & Soil Pollution*, vol. 180 No. 1-4, March 2007 at 261-169.
- 50 The Coca Cola Company. [Press Release] "The Coca Cola Company Begins Global Launch of Innovative PlantBottle." November 16, 2009.
- 51 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 37.
- 52 U.S. Government Accountability Office. "Bottled Water: FDA Safety and Consumer Protections are Often Less Stringent than Comparable EPA Protections for Tap Water." June 2009 at 23.
- 53 Doss, Joseph. International Bottled Water Association. Testimony on "Assessing the Environmental Risks of the Water Bottling Industry's Extraction of Groundwater." Subcommittee on Domestic Policy. Committee on Oversight and Government Reform. December 12, 2007 at 4.
- 54 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 30.
- 55 Natural Resources Defense Council. "Pure Drink or Pure Hype?" March 1999; Naidenko, Olga, et al. Environmental Working Group. "Bottled water contains disinfection byproducts, fertilizer residue and pain medication." October 2008; U.S. Government Accountability Office. "Bottled Water: FDA Safety and Consumer Protections are Often Less Stringent than Comparable EPA Protections for Tap Water." June 2009.
- 56 Rodwan, John. "Confronting Challenges: U.S. and International Bottled Water Developments and Statistics for 2008." *Bottled Water Reporter*. April/May 2009 at 13.
- 57 DWSRF Funding data from: U.S. Environmental Protection Agency. Office of Water. "Drinking Water State Revolving Fund Allotments." 1997-2008; Adjusted for inflation using: Sahr, Robert C. "Inflation conversion factors for years 1774 to estimated 2019." Oregon State University, Political Science Department. January 16, 2009.
- 58 College Sustainability Report Card. Report Card 2010. Disposable water bottle ban. Available at <http://www.greenreportcard.org/report-card-2010/schools>, accessed February 17, 2009.
- 59 International Bottled Water Association. [Press release] "U.S. Conference of Mayors Resolution No. 90." June 26, 2007; U.S. Conference of Mayors. "2008 Adopted Resolutions Supporting Municipal Water Systems." 76th Annual Meeting. June 20-24, 2008, Miami.
- 60 Larson, Janet. "Bottled Water Boycotts: Back-to-the-Tap Movement Gains Momentum." Earth Policy Institute. December 7, 2007; Earth Policy Institute. "Selected Bottled Water Bans and Back-to-the-Tap Initiatives." December 2007.
- 61 Food & Water Watch. "Free Your Event From Bottled Water." November 2008 at 9-13; Burros, Marian. "Fighting the Tide, a Few Restaurants Tilt to Tap Water." *The New York Times*. May 30, 2007.
- 62 WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation. "Water for Life: Making it Happen." World Health Organization and UNICEF. 2005 at 40.
- 63 WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation. "Water for Life: Making it Happen." World Health Organization and UNICEF. 2005 at 2.
- 64 Nestlé Waters North America. [Press Release] "Supporting Water: World Water Day and Beyond." March 19, 2009.
- 65 The Coca Cola Company. [Press Release] "The Coca Cola Company Pledges to Replace the Water it Uses in its Beverages and Their Production." June 5, 2007.
- 66 PepsiCo. "Performance with Purpose: Creating a Better Tomorrow for Future Generations." [Corporate Citizenship Report] 2008.
- 67 Starbucks. [Press Release] "Ethos Water and H2O Africa Join Forces to Help Alleviate the World Water Crisis." March 6, 2008.
- 68 Starbucks. [Press Release] "Ethos Water and H2O Africa Join Forces to Help Alleviate the World Water Crisis." March 6, 2008.
- 69 Nestlé Waters North America. [Website] Revenue Data from Beverage Marketing Corporation, 2008.
- 70 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 40. Calculation: 2.6 million/3.8 billion = .00068 = .068 percent
- 71 PepsiCo. [Annual Report] "We are Performance with a Purpose." 2008. Calculation: 5 million/43 billion = .00012 = .012 percent
- 72 Beverage Marketing Corporation. [Press Release] "Bottled Water Perseveres in a Difficult Year, New Data from Beverage Marketing Corporation Show." April 20, 2009.
- 73 Calculation: 10 million/.05 = 200 million = # of bottles needed to reach 10 million if 5 cents is donated per bottle; 200 million x \$1.80 = revenues from sales = 360 million
- 74 CEO Water Mandate. "The CEO Water Mandate—Endorsing CEOs." Available at www.unglobalcompact.org/Issues/Environment/CEO_Water_Mandate/endorsingCEOs.html. Accessed February 26, 2010; CEO Water Mandate. (Preamble and Core Elements) "The CEO Water Mandate: An initiative by business leaders in partnership with the international community."
- 75 Polaris Institute. [Factsheet] "The CEO Water Mandate." 2010.
- 76 Polaris Institute. [Factsheet] "The CEO Water Mandate." 2010.
- 77 Public Eye Awards. [Press Release] "Roche and the Royal Bank of Canada: Worthy Public Eye Award Winners." January 27, 2010.
- 78 Research and Markets. [Brochure]. "Future Opportunities in Bottled Water: Leveraging Purity, Ethical and Health Credentials." Business Insight, July 2009.
- 79 Nestlé Waters North America. "The Shape of Citizenship" Corporate Citizenship Report. 2008 at 7,8.
- 80 Parker-Pope, Tara. "School Water Fountains to Prevent Obesity." *The New York Times*. March 30, 2009.



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