



## The Facts about Bottled Water

Commercially-bottled drinking water carries many negative impacts in comparison to municipal tap water:

### WASTED RESOURCES

◆ On average **29 billion plastic bottles** are manufactured for water in the U.S. each year which requires the equivalent of more than **17 million barrels of crude oil**.<sup>1</sup>

◆ The number of water bottles consumed by the U.S., if laid end-to-end, could **encircle the Earth 150 times** each year.<sup>2</sup> Less than 1/4 of these bottles are recycled.<sup>3</sup>

◆ Nationally, more than 3/4 of discarded water bottles end up in the landfill.

◆ It takes about **three liters of water** to produce one liter of bottled water!<sup>4</sup>

### CARBON FOOTPRINT

◆ Plastic water bottle production creates **2.5 million tons of carbon dioxide** annually, a greenhouse gas contributing to climate change.<sup>5</sup>

◆ The energy required for **long-distance shipping** of bottled water from distant sources such as France, Fuji, and Finland multiplies the bottled water “carbon footprint.”

### UNNECESSARY EXPENSE

◆ Commercially-bottled water costs about \$2/bottle. Municipal tap water costs less than a penny/gallon!

**For more information visit [www.a2gov.org/A2H2O](http://www.a2gov.org/A2H2O)**

## SAFETY?

◆ Bottled water companies lack transparency regarding the health and safety of their products. Research from the Environmental Working Group found that less than 2 percent of bottled-water brands disclosed the following facts on their label or website, all of which are helpful indicators of the safety of their product: the water's source, purification methods, and chemical pollutants in each bottle.<sup>6</sup>

◆ An independent report from the National Defense Council released test results from 103 bottled water brands and found that 26 of the samples contained substances that would have violated California state drinking water regulations.

## What Can I do?

**REFILL:** Refill and reuse a water container when a portable beverage is needed, and use a mug/glass and pitcher or tap when at home or work. Refillable “**A2H2O**” water bottles are available from the Customer Service Center, 220 E. Huron, open weekdays from 8-5, 734.794-6333. Visit [www.a2gov.org/A2H2O](http://www.a2gov.org/A2H2O) for more information.

**RECYCLE:** Recycling empty plastic bottle will recover over **60% of the energy and resources** used to make the original plastic bottle. Locally, at the City of Ann Arbor's Materials Recovery Facility, water bottles (marked #1 PETE) from 20 area communities and haulers are sorted, baled, and shipped to Mohawk Industries in Summerville, GA to be remanufactured into fabric, fleece, and carpeting, similar to polyester products. Each bale of sorted, compressed PETE water bottles weighs about 940 pounds. With each bottle weighing roughly one ounce, each bale contains over 15,000 water bottles. In 2008, the city's MRF shipped **1180 tons of PETE plastic** and was paid an average of \$400 per ton (this income helped offset the cost of recycling).

Sources: 1. Earth Policy Institute 2008; 2. NBC News; 3. Container Recycling Institute; 4. The New York Times 2008; 5. Pacific Institute 2006; 6. CNN News 2009

Information assembled by the City of Ann Arbor.  
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City of Ann Arbor  
**A<sup>2</sup>H<sub>2</sub>O**  
Only Tap Water  
Delivers  
[www.a2gov.org](http://www.a2gov.org)

**Selected Resources:**

- [Container Recycling Institute](http://container-recycling.org/assets/pdfs/reports/2007-waterwater.pdf) <http://container-recycling.org/assets/pdfs/reports/2007-waterwater.pdf>
- [International Bottled Water Association](#)
- [Earth Policy Institute](#)
- [Natural Resources Defense Council](#)
- [www.thinkoutsidethebottle.org](http://www.thinkoutsidethebottle.org)
- [Center for a New American Dream](#) refillable bottle pledge <http://c3neewdream.org>
- [National Geographic](http://news.nationalgeographic.com/news/2006/02/0224_060224_bottled_water_2.html) [http://news.nationalgeographic.com/news/2006/02/0224\\_060224\\_bottled\\_water\\_2.html](http://news.nationalgeographic.com/news/2006/02/0224_060224_bottled_water_2.html)
- National Recycling Coalition
- American Waterworks Association [www.drinktap.org](http://www.drinktap.org)
- City of Ann Arbor [www.a2gov.org/a2h2o](http://www.a2gov.org/a2h2o)
- US EPA <http://www.epa.gov/safewater/faq/faq.html>.

**Table 1. Consumption of Bottled Water, Total and Top 10 Countries, 2000 and 2005**

Country	2000			2005		
	Total Volume (million liters)	Share of Global Consumption (percent)	Consumption Per Person (liters)	Total Volume (million liters)	Share of Global Consumption (percent)	Consumption Per Person (liters)
United States	17,955	16.5	61.6	28,651	17.4	99.2
Mexico	12,464	11.5	124.3	18,861	11.5	179.7
China	6,012	5.5	4.7*	12,901	7.8	9.9*
Brazil	6,838	6.3	39.0*	12,252	7.4	65.8*
Italy	9,251	8.5	160.4	11,145	6.8	191.9
Germany	8,427	7.8	101.8	10,581	6.4	128.4
France	7,456	6.9	126.2	8,424	5.1	139.1
Indonesia	4,314	4.0	20.2*	7,633	4.6	33.3*
Spain	4,221	3.9	105.6	5,923	3.6	147.1
India	2,157	2.0	2.1*	6,177	3.8	5.6*
All others	29,391	27.1		41,982	25.5	
<b>Total</b>	<b>108,517</b>			<b>164,530</b>		
<b>Global average</b>			<b>17.9</b>			<b>25.5</b>

Source: International Bottled Water Association.

\* These numbers are not directly available; they were calculated with population data from the U.S. Bureau of the Census.