Water Bottle Pollution Facts



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In 1976 Americans drank an average of 1.6 gallons of bottled water every year. Roughly 30 years later consumption increased to 30 gallons per person, according to the Earth Policy Institute --- despite the fact that bottled water can cost anywhere from 240 to 10,000 times more than tap water, which is brought right to your home for pennies a gallon. Bottled water also creates its own share of pollution --- the production of plastic bottles requires millions of barrels of oil per year and the transportation of bottled water from its source to stores releases thousands of tons of carbon dioxide. (See References 1)

Oil Consumption

According to "National Geographic," Americans drink more bottled water than any other nation, purchasing an impressive 29 billion bottles every year. Making all the plastic for those bottles uses 17 million barrels of crude oil annually. That is equivalent to the fuel needed to keep 1 million vehicles on the road for 12 months. If you were to fill one quarter of a plastic water bottle with oil, you would be looking at roughly the amount used to produce that bottle. (See References 2)

Recycling

The recycling rate for those 29 billion bottles of water is low; only about 13 percent end up in the recycling stream where they are turned into products like fleece clothing, carpeting, decking, playground equipment and new containers and bottles. In 2005, that meant approximately 2 million tons of water bottles ended up in U.S. landfills, according to the National Resources Defense Council (NRDC) (see References 3, Question 7). Plastic bottles take centuries to decompose and if they are incinerated, toxic byproducts, such as chlorine gas and ash containing heavy metals, are released into the atmosphere.

Transportation

Bottled water often takes a long journey to U.S. markets. In 2006, the equivalent of 2 billion half-liter bottles arrived in U.S. ports, according to the NRDC. Fiji shipped 18 million gallons of bottled water to California, releasing about 2,500 tons of transportation-related pollution. Western Europe's shipment of bottled water to New York City that year released 3,800 tons of pollution. (See References 3, Question 7) The Earth Policy Institute estimates that the energy used to pump, process, transport and refrigerate bottled water is over 50 million barrels of oil annually (see References 4).

Contaminants

Bottled water isn't always as safe as tap water. The NRDC conducted a four-year study of the bottled water industry and concluded that while most bottled water is safe to drink, there are areas of concern. Roughly 22 percent of the water tested contained contaminant levels that exceeded strict state health limits. One study found that hormone-disrupting phthalates had leached into bottled water that had been stored for 10 weeks. (See References 3, Questions 2 & 3)

References (4)

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Resources (1)

• Worldwatch Institute: Bottled Water Pricey in More Ways than One (2011)

About the Author



Suzanna Didier's work appears in online publications including the National Geographic website, SFGate and Local.com. She is an avid cook who lives on a hobby farm, direct-markets organic produce to local restaurants and has taught at the preschool, elementary and college levels. Didier holds a Master of Arts in education from the University of Oregon.

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