

A Sustainable Environment: Our Obligation to Protect God's Gift

by
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The Problem with the Plastic Water Bottle

Last month, I wrote an article as to why we should not drink bottled water. The focus of that article was on the water itself. However, the plastic bottle is also an environmental problem, and I will explain why.

About 50 billion plastic water bottles are produced and consumed every year with 30 billion of those in the U.S. Although we represent 4.5% of the world population, we consume 60% of the plastic water bottles. These plastic bottles are made from polyethylene terephthalate (PET) which is an organic chemical compound produced from oil. In fact, the amount of oil needed to produce a PET bottle will fill one-fourth of the bottle. To manufacture all these bottles requires 17 million barrels of oil per year, but in addition to that you can add the energy required to pump, process, transport and refrigerate the bottled water. Then we are talking about consuming 50 million barrels of oil for something we really don't need.

It also takes three times as much water to manufacture the bottle as it does to fill it. PET is not biodegradable but rather photodegradable, but unfortunately most of the used bottles end up in a landfill where they can remain forever. We only recycle about 20-25% of the plastic bottles and thus foregoing the opportunity to manufacture recycled products like carpeting, synthetic decking, playground equipment or even new bottles and containers.

Another problem with plastic bottles is their impact on the oceans. According to the Ocean Conservatory, plastic bottles and plastic bags are the most prevalent form of pollution found on our beaches and in our oceans – every square mile of the ocean has over 46,000 pieces of floating plastic in it. Ten percent of the plastic manufactured worldwide ends up in the ocean, the majority of that settling on the ocean floor where it will never degrade.

So what should we do about it? Let's take a look at what the City of San Francisco is planning. San Francisco may implement one of the strictest bottled water bans in the country if the Board of Supervisors approves a proposal to ban its sale on public property early this year. The proposed legislation would gradually phase in a ban on the sale of bottled water of 21 fluid ounces or less on all city properties with leases signed after 2014 and at concerts, large events, parks and food trucks. The sales ban at events of 100 attendees or more on public property would be fully implemented in 2016, and the city would need to ensure there is access to an alternative potable water supply. To make the initiative feasible, the city will study how to supply water better at events and prioritize installation of water fountains and reusable bottle filling stations.

A bottled water ban similar to what San Francisco is proposing is something that we should all pursue, starting at home. This attitude should then be extended to any large groups like business meetings, parties, community functions, or even at formal affairs. When I was

teaching at the Illinois Institute of Technology, the school's catering department was instructed not to provide bottled water at any meeting or function that I organized. They had no problem with that, and after a few such meetings it became "business as usual" for the following ten or so years. They served pitchers of water in glasses or plastic cups that were eventually recycled. This is something that everyone should strive to do. In fact, if you are at an event where bottled water is being served, you should refuse it unless, of course, you are in a country or area where the quality of the water is questionable.

At the beginning of the 2013-14 National Hockey League season, the Chicago Blackhawks were selling, for \$99, vials of water from the ice upon which they skated while winning the 2013 Stanley Cup. However, this is not as interesting as what is happening in Australia, a country that has a major problem with water availability. In its city of Melbourne, a utility responsible for providing drinking water has introduced a campaign against bottled water. It is selling bottled all-natural February moonlight ("feeds up to five night skies"), jars of pure organic fresh air ("sourced from the most pristine atmosphere") and boxes of eco-friendly rays of sunshine (available in two sizes: Aurora Maximus and Aurora Petite). The company says that these bottled products make as much sense as bottled water. Do you want to buy a bottle of Chicago air?