



Refill Not Landfill

12/14/2018

Lexi Lambros

College Credit English

14 December 2018

Executive Summary

This is a proposal written to the administration at Pattonville High School to promote a website endorsing the water bottle fillers coming in 2019 through Pattonville media. The website is officially named *Refill Not Landfill*.

Goals

1. To encourage students to use the water bottle fillers.
2. To persuade students to use reusable water bottles instead of disposable plastic bottles.

Specifications of *Refill Not Landfill*

The website consists of two main pages and three subpages. The first main page announces how the school is having water bottle fillers installed, and the advantages of the water bottle fillers. The second page introduces the problems of plastic water bottles. The three subpages explain how plastic is wasteful, unhealthy, and the water in bottles is no different than tap. Various charts and images are included.



(UC Davis Student Housing)

Advantages of Water Bottle Filling Stations¹

- Only takes 15 seconds to fill a 16 ounce bottle
- Automatically turns off after 20 seconds
- Automatic sensor when a bottle is on it
- Touch-free filling so no germs spread
- Filtered water
- The water isn't pumped with air so no splash-back or airborne bacteria picked up
- Tracks how many bottle have been filled



(Horizons Water Bottle Filling Stations)

¹ Data provided by Hagerty

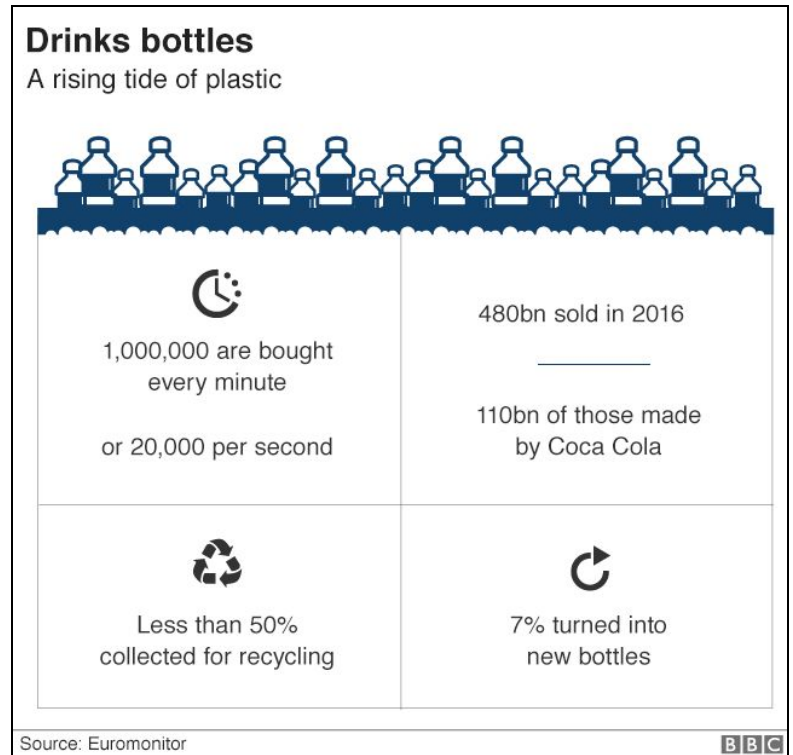
Problems Surrounding Plastic Bottles

I. Plastic Bottles are Wasteful

Likewise, plastic water bottles have generated immense amounts of plastic waste in the ocean. Data analyzing the the amount of plastic in the ocean is shocking. Between 5.3 million and fourteen million tons of plastics, much of it being plastic water bottles, end up in the ocean from coastal regions yearly (Parker 35). This doesn't account for the plastic that has been recycled properly in a dump, or littering the land. Since we don't necessarily see plastic in the

ocean everyday, it is easy to ignore how much of it that has been accumulating.

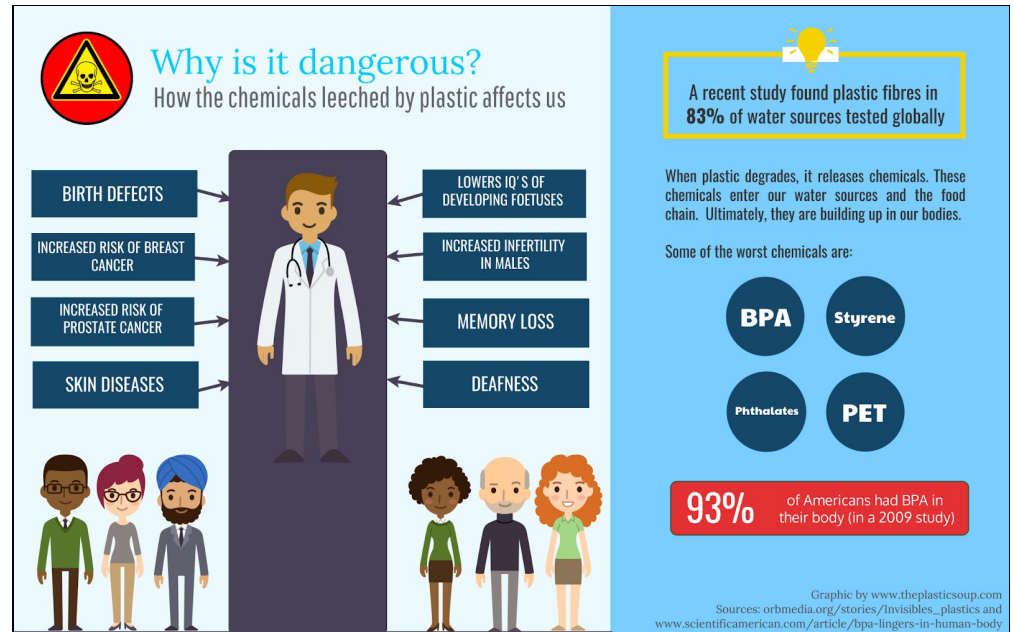
However, the expanse of plastic that is in the ocean directly affects our society. Not only is plastic building up in our oceans, but it is also being broken down into miniscule pieces called "microplastics" (39). While plastic degradation seems beneficial to the environment, it is not actually helpful. Animals living in the ocean absorb the microplastic in their bodies, and it accumulates in their muscle, fat, and tissue (Brighty, Jones, Ruxton 5). This decreases the lifespan of marine animals dramatically. The preservation of marine animals is critical for sustaining our environment and also contributes to a large part of our diet. Consequently, when fish are caught by fishermen and introduced into our diet, the microplastics are transferred from the fishes' bodies to our bodies when we eat seafood.



(Seven Charts that Explain the Plastic Pollution Problem)

II. Plastic Bottles Cause Health Problems

There is evidence that disposable water bottles are unsafe for humans to drink from. In "A High-Level Science Review for 'A Plastic Oceans' Film," scientists have concluded that plastics have a wide range of negative effects on humans. The data



(Why is it Dangerous?)

has shown that plastics affect the biochemical mechanisms in the body, development of the body, and increase the probability of developing life-threatening diseases (Brighty, et al. 11). This data is concerning because we use plastic so often in our everyday lives. As a society, we are always trying to live the healthiest lives possible, so many people are drinking water instead of soda and coffee. We drink water to help our joints, kidneys, and skin, and to lose weight, but drinking out of plastic water bottles causes unintentional damage to our bodies. Chemicals in plastic can cause many lifelong complications such as infertility, ovarian and breast diseases, asthma, allergies, and liver dysfunction (11). All of these effects drastically decrease quality of life and can have permanent consequences just from getting a drink of water.

III. Taste Between Tap Water and Bottled Water is Insignificant

Furthermore, bottled water and tap water are so similar to each other that using bottled water is more wasteful and expensive. According to Peter Gleick, a water expert and MacArthur fellow, “about 40 or 50 percent of our bottled water actually comes from reprocessed municipal water” (“War on Tap”). Since much of bottled water comes from tap water, this indicates that the differences in taste and nutritional value are insignificant. Also, with the amount of municipal water in bottled water, drinking water from the tap is more convenient and economical than buying it at a store. Interestingly, bottled water is not regulated as strictly as tap water and can be tainted. Gleick argues that 60 to 70 percent of our bottled water isn’t regulated by the federal government because it does not cross state lines, whereas tap water is quality tested dozens of times a day (“War on Tap”). The lack of testing of bottled water increases the chances of drinking bottled water that is actually unsafe.

A Proposal to the School

I am asking Pattonville High School to promote *Refill Not Landfill* on the *PattonvilleToday* website. My request is that my website be featured on *PattonvilleToday* as either a small news article with a link to my website or the link to my website under the announcements page.

Outcomes and Benefits

Benefits of *Refill Not Landfill*

- Students will be more likely to drink water. The benefits of drinking water are:
 - It relieves fatigue
 - It helps release toxins
 - It aids digestion
 - It boosts mood
 - It alleviates headaches and migraines²
- Students stay hydrated
 - Students are more likely to pay attention in class and succeed
- It encourages the use of water bottle fillers
- It informs and educates the students about why the water bottle fillers should be used
- It reduces plastic pollution

Outcome

- Healthier students
- Less waste
- More educated students on plastic pollution

² Data on the benefits of water provided by Healthy Futures

Final Comments

Ultimately, what I hope to accomplish with my proposal is to educate students at Pattonville about the benefits of water bottle fillers and the harmful effects of plastic. These wasteful actions have perpetuated the widespread problem of pollution in the environment, and it will only become worse if direct action is not taken. Fortunately, there are many solutions for reducing excessive plastic pollution. I believe that a good place to begin in the initiative to reduce plastic pollution is to educate students on the damages that plastic water bottles can cause to the environment. Therefore, they will no longer be ignorant to the consequences of their actions, and they will take responsibility for their personal contribution to this problem and refill their water bottles instead.

Link to *Refill Not Landfill*

<https://sites.google.com/student.psd3.org/refill-not-landfill/home>

Works Cited

- Bestlyy Editors. *35 Best, Top Rated BPA Free, Stainless Steel Reusable Water Bottles*. 14 Dec. 2016. *Bestlyy*, www.bestlyy-curatedbyquality.co/2016/12/14/35-best-top-rated-bpa-free-stainless-steel-reusable-water-bottles/. Accessed 28 Nov. 2018.
- Brighty, G.C., Jones, D. and Ruxton J. "A High-Level Science Review for 'A Plastic Oceans' Film." *Plastic Oceans*, plasticoceans.org/plastic-pollution-research-papers/. Accessed 20 Sept. 2018.
- Hagerty, James R. "With Bottle-Fillers in Mind, The Water Fountain Evolves." *ProQuest*, 25 Mar. 2013. doi: 1319174366. Accessed 29 Oct. 2018.
- Healthy Futures. "10 Benefits of Drinking Water." *Healthy Futures*, National Education Association, <http://healthyfutures.nea.org/s-e-w-what-10-benefits-of-drinking-water/>. Accessed 13 December.
- "Horizons Water Bottle Filling Stations" *Horizons*. Boulder Valley School District, <http://horizonsk8school.org/skylines/horizons-water-bottle-filling-stations/>. Accessed 12 December 2018.
- Landa, Jennifer. *Study: More Than 24,500 Chemicals Found in Bottled Water*. 25 June 2017. *Live to Be Well*, velaravelaqua.com/24500-chemicals-found-in-bottled-water/. Accessed 29 Nov. 2018.
- Medlock, Lynne. *Why is it Dangerous? Plastic Soup*. www.theplasticsoup.com/why-plastic-2/. Accessed 26 Nov. 2018.
- Parker, Laura. "We Made Plastic. We Depend on it. Now We're Drowning in it." *National Geographic*, National Geographic Society, June 2018, www.nationalgeographic.com/magazine/2018/06/plastic-planet-waste-pollution-trash-crisis/. Accessed 15 Sept. 2018.
- "Seven Charts that Explain the Plastic Pollution Problem." *BBC*, 10 December 2017, www.bbc.com/news/science-environment-42264788. Accessed 21 Sept. 2018.
- UC Davis Student Housing. *UC Davis Student Housing: Bottle Fillers*. UC Davis,



pingpdf.com/pdf-uc-davis-student-housing-bottle-fillers.html. Accessed 28 Nov. 2018.

War on Tap: America's Obsession with Bottled Water. NPR, Philadelphia, 2010. *ProQuest*, doi:75878. Accessed 21 Sept. 2018.