The Feasibility of Eliminating Disposable Plastic Water Bottles at Illinois Wesleyan University

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The Problem

Disposable plastic water bottles greatly contribute to environmental harms in the world’s landfills and waterways.

Disposable plastic water bottle use has increased dramatically since first introduced to the market in 1989. The PET plastic used in the bottles requires 74 million barrels of oil a year. Once used, only 12% of bottles complete the recycling process, and end up either land filled, littered, or in our waterways. The breakdown of the PET plastics also leads to the chemical leaching of antimony, phthalates, toluene, and other known carcinogens.

Drinking Water Regulations

Setting regulations on both bottled and tap water is something that we have entrusted to our government officials. Importantly, however, while regulations on tap water have increased over time, those on bottled water are not nearly as strict. Private bottled water companies lead the consumer to believe that their product is safer and cleaner than tap water, but without strict regulation, this is not assured.

The Local Alternative

Bloomington tap water is taken from Lake Evergreen and Lake Bloomington, located ~15 miles north of Bloomington. The water is tested frequently, and has consistently met or exceeded standards set forth by the Clean Drinking Water Act of 1974.

Here at IWU

A survey was conducted to assess behavior related to bottled water consumption (N=146). In addition, a focus group was held to gather student input on a disposable water bottle ban. The survey and focus groups both concluded that eliminating single use plastic water bottles in sales locations on campus is feasible.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes(%)</th>
<th>No(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you buy disposable water bottles?</td>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>Do you own a reusable water bottle?</td>
<td>95</td>
<td>5</td>
</tr>
<tr>
<td>If you had access to filtered tap water on campus, would you be more inclined to use a reusable water bottle?</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>Would you support a ban of disposable plastic water bottle sales on campus?</td>
<td>70</td>
<td>30</td>
</tr>
</tbody>
</table>

In order to successfully eliminate disposable water bottles on campus, respondents identified a need for education and instilling a deeper culture of sustainability. Increasing the number of hydration stations on campus was also seen as important in that it increases the convenience of using a reusable water bottle. Finally, the current meal system was found to be a large barrier. Following the study period, IWU’s food provider, Sodexo, stated that it will no longer offer disposable water bottles as an option on the meal exchange program.

Conclusions

A review of literature on the negative impacts of the bottled water industry and regulations on drinking water, as well as research specific to Illinois Wesleyan University, identified certain barriers, and has established several solutions. If key actions are taken, such as improving infrastructure and creating a culture of sustainability on campus, the elimination of bottled water can be successfully achieved.