

## Fostering Social Change Through Reduced Plastic Water Bottle Sales

### **Problem Statement**

Our university advertises itself as an environmentally conscious institution. While this is true in many regards, significant improvements can still be made in many areas. Students are aware of these issues, yet frequently fail to make lifestyle choices in compliance with our university's environmental philosophy. Despite the access to clean tap water, disposable bottled water can be found across campus for purchase, and many students opt for the use of this resource-intensive commodity.

The student government passed a resolution in the spring of 2012 declaring government and student support to ban the sale of bottled water on campus. Despite the passage of this resolution, the university still sells and gives away bottled water, and students still consume it. We wish to reverse this trend, and create a social atmosphere that stigmatizes the wasteful consumption of disposable bottled water. This project will have a significant environmental impact, because it will not only reduce waste produced, but also inspire our school's students, faculty, and administrators to adopt good habits that will carry over to other parts of their lives.

### **Project Summary/Background**

Our campaign strived to create a campus-wide social atmosphere shift away from the use of disposable plastic water bottles. In the past, other students have attempted to eliminate the option of disposable bottles on campus; however, they were unsuccessful. Our team concluded that the main reason the university continues to sell bottled water is that the student body continues to buy it without consequence and Dining Services continues to make a profit from it.

Our project aimed to reduce plastic water bottle waste and alter the atmosphere present at our university by creating a model for alternative behavior, increase social pressure and to

develop more accessible water filling and carrying options for the community. Our plan included educating, providing necessary water infrastructure such as a hydration station, and making student involvement enjoyable. We provided the student body with merchandise and collected over 200 signatures as a pledge to stop the distribution of disposable bottled water on our campus. With the help of our campus' Environmental Action Organization (EAO), we offered the student body Nalgene® bottles decorated with designs created by students. We are currently working with Dining Services to come to an agreement on the long lasting changes that the reduction of sales will have on the purchasing habits of the campus café. Decreasing the distribution of these bottles reduces the total amount of waste created by the school. Prior to our campaign, one eatery on campus went through 20,460 liter and 53,568 half-liter bottles in one year (data from the manager of the our campus café).

There are many organizations that have worked across the country to reduce the amount of bottled water consumed, especially on college campuses. We capitalized on the assets of other successful campaigns in order to develop our own unique plan. We felt that large-scale initiatives would not be specific enough to influence and inspire our campus. Creating our own plan allowed us to be innovative and tweak aspects to ensure its effectiveness for our school specifically.

These campaigns include Take Back the Tap, Think Outside the Bottle, Refill not Landfill, and One Earth One Bottle. Take Back the Tap provides intercollegiate support for campaigns on campuses and allows for a network for campaign leaders<sup>1</sup>. Think Outside the Bottle encourages the change in mentality as the most affective way to see change amongst a large group, a perspective that inspired us to change the focus of our plan<sup>2</sup>.

Refill not Landfill is a campaign that is supported by many large companies, including Facebook, Brita and Nalgene<sup>3</sup>. The focus of this campaign is the encouragement of any reusable container as an alternative to the purchase of plastic bottled water, an ideal that prompted us to sell reusable water bottles as part of our initiative.<sup>3</sup> One Earth One Bottle is a campaign that was organized specifically for Southern New Hampshire University<sup>4</sup>. This campaign pairs the purchasing of a reusable bottle with the signing of a pledge to encourage continued use of the reusable bottle and a change in habit, which was an integral part of our campaign as well<sup>4</sup>.

In order to educate those most likely to use disposable water bottles there were several necessary environmental tradeoffs. Purchasing new Nalgene® bottles has a negative impact on the environment through the fossil fuel and resources used to create and distribute these durable plastics bottles. We also printed hundreds of standard letter-size posters to create slogans that attracted student interest and attention to create awareness of the issue and recognition of our campaign's efforts on campus.

### **Relationship to Sustainability**

Disposable water bottles as an entity require energy and resources throughout their whole life cycle. This use of resources is especially unnecessary when clean potable tap water is available (like it is at our university). The impact on waste systems is specifically relevant to the potential sustainability of our project. It is important to end the continual flow of disposable plastic products from our university, especially when the water bottles sold on campus are branded with the university's name. This direct link to our university has caused us to see the impact and scale of our waste output, but also the potential to eliminate it. The university consumes 341 disposable water bottles per day at a single eatery on campus. Though any reduction would be a success, terminating disposable water bottle sales would permanently

decrease both our campus' waste output from bottled water and the resources needed to produce, bottle and deliver the water.

We expect that a behavior shift will be developed through our campaign resulting in our student body making more environmentally conscious decisions. For example, choosing a dispenser beverage in a reusable bottle over a plastic bottled beverage. We hope that this collective environmental consciousness will penetrate into other areas of campus life.

There was some concern regarding social benefit impact of eliminating plastic water bottle sale because it could potentially eliminate jobs at the bottling company our university purchases from. After assessing the quantity of water bottles sold to our school in comparison to the other products the company sells to the university we found the amount of water bottles, although large on a consumption scale, was small enough not cause a job loss. On the contrary one can argue that the infrastructure needed to install and maintain a hydration station would benefit our community and local economy in a way that would offset potential losses in the termination of disposable water bottle sales.

### **Materials and Methods**

While most tasks were delegated throughout our team, each team member did specialize in certain areas. Gwyn and Margot were the drivers behind all of the artistic elements of our campaign. This included designing our logo, stickers, posters, and petition. Gwyn worked extensively with Creative Labels of Vermont to order our promotional stickers. Margot was also in charge of meeting notes and organization. Jeff took on the role of ordering both the initial and secondary order of water bottles, working with PrintGlobe. Jeff also organized the two film screenings and helped to publicize our campaign in both our school newspaper and through media outlets within the university. Jeff also stayed in constant contact with the university's

Sustainability Coordinator throughout the campaign. Amalie maintained contact with the university's Dining Services and Facilities as well as helped to organize the water taste test. She also spoke with Water Quality Products magazine, who published an article on the campaign. Amalie was a key member of the social media team, keeping the EAO Facebook page and Instagram account updated and relevant with interesting and informative posts. Throughout every stage of our campaign, EAO club members were heavily involved and supplied much of the manpower necessary to complete the tasks at hand.

There were several cornerstones to our campaign. The first was covering campus in posters (printed on scrap paper) that had provocative slogans in order to create dialogue amongst the student body. These posters were refreshed each week for four weeks with new and exciting slogans. Throughout this process, images of the posters were posted to Instagram and Facebook in order to engage a larger audience. Multiple university Instagram accounts were tagged in each post, as this increased the number of viewers reached. Students reciprocated our enthusiasm by reposting, sharing, "liking" and commenting on our posts.

Next, we created a water bottle garland in our student center. This garland had 341 bottles in it, and a corresponding 20'x7' sign that read "This is how many water bottles are sold EACH DAY in the Pub." University communications photographed and publicized the garland via Instagram. The first round of water bottles (47) was intentionally sold during this time in order to maximize visibility and student awareness. In addition to selling water bottles in the student center, we encouraged students to sign our petition agreeing to stop buying bottled water and support efforts to terminate the sale of bottled water on campus.

We furthered our campaign by creating and distributing a "bathroom reader" to go on the backs of all the bathroom stall doors on campus. Included on this reader were statistics from our

university, nationwide statistics and an encouraging call to action. The implementation of the bathroom reader coincided with the first of our two film screenings, the film *Flow: For the Love of Water*. We specifically chose two water bottle documentaries to insure that we had educated our student body on the many sides of the disposable water bottle issue.

Our second film showing, *Tapped*, began the same day that we began the second round of water bottle sales. We had 75 water bottles to sell, with stickers included in each one. Again, students were encouraged to sign our petition. During this time, 25 water bottles were given away for free to students who purchased water bottles from our campus café. Small stickers were placed on disposable water bottles being sold in the café that offered the bottle-buyer a free reusable bottle if they stopped by our table, a technique commonly referred to as “shop dropping”.

Two hydration stations are currently slated for installation across campus. EAO partnered with staff from the Science Library to apply for a grant to update water infrastructure within that library. EAO identified a distinct lack of water infrastructure in one academic building, where Facilities has agreed to work with us to fund and install a new hydration station. In the new dorm being built on campus, our campaign has helped to push designers to plan the water infrastructure to include ample hydration stations. Our campaign team is also working with Dining Services to make sure that the gains we have made thus far are not lost. We will continue to meet with them for the rest of the semester, and in upcoming semesters as well.

### **Results, Evaluation and Demonstration**

It is difficult to quantify how the student body has reacted to this campaign, as the aim of this campaign is to change the student body’s perspective towards buying disposable water bottles. Just from word of mouth, there has been a notable increase in student awareness of the

campaign. The water bottle garland that we installed in the Student Center, received the most attention out of any of our projects. Not only did we see countless students stopping to look at the garland and read the sign, but our campus Instagram account also posted multiple pictures of the garland, each of which received over 100 “likes”. There were also many articles written about our campaign in the campus’ News Digest, Water Quality Products Magazine, the Alumni Magazine, as well as several articles written by students in journalism classes. We were also contacted by various environmental organizations offering help with our campaign, including the New York Department of Environmental Conservation, Haws Corporation (producer of Brita Hydration Stations), LifeSource Water Systems and our university’s Alumni Council.

When we sold Nalgene® water bottles at a subsidized price with the our campaign logo on them, we allowed ourselves three days to sell all 47 bottles, but we sold out of the bottles halfway through the second day. We targeted our sales at students that did not already have reusable water bottles, in order to make sure that this would be influencing those who would be more likely to buy bottles from the campus café. Because of tremendous student interest and support which far surpassed our expectations, we were prompted to make another order of 75 Nalgene® to be sold to the student body.

Prior to our campaign, the campus café, one of three dining areas on campus and arguably the most highly frequented by students, bought 660 1-liter water bottles and 1728 ½-liter water bottles per week. During the course of our campaign, the campus café stopped the sale of the 1-liter water bottles. Because no students complained or brought this change up to any of the café’s staff, the management decided against continuing their future orders of the 1-liter water bottles. Consequently, the café now orders 206 less cases of bottled water per year. We expect the

momentum of our campaign to continue to further this trend. Given the amount of time required to create social change, this initial reduction indicates success for our campaign.

One of the reasons we feel that this campaign has been so successful on our campus is because of its transferability and scalability. Although this campaign was very focused on a specific campus-wide problem, we believe that the principles of our campaign can be spread to a much wider community. We also believe that we are leading our student body to think more critically about their plastic consumption in particular and waste in general, therefore leading students to reduce their overall waste. By targeting disposable water bottle consumption, we are encompassing a plethora of environmental, social, and economic issues.

We are addressing the unsustainable extraction of water, the harmful effects of plastic and its persistence in the environment, and the energy that is wasted by the production of bottled water. By bringing up these issues through the platform of disposable water bottles, we hope to initiate a shift in the student body's mindset towards these broader issues, and influence their day to day habits. We feel that the success of our campaign is due to the thought-provoking questions we have raised about the impact of bottled water. In terms of the scalability of our project, transferring this campaign to a larger scale would require an increased amount of resources and possibly different information distribution techniques, but the guiding principles behind the project would remain the same. It might be more difficult to create a social pressure and social change in a broader community because it would be more challenging to pinpoint what types of persuasion would be most effective. One would also not be able to utilize the same sort of social pressure present within a small college community. However, by extrapolating the core components of our campaign and manipulating them for application to a larger scale, they may remain effective.

We will be presenting our campaign through a poster, as well as supplementing our poster with tokens from our campaign such as flyers, Nalgene® bottles, stickers, and copies of articles published about our campaign.

### **Conclusions**

Our campaign has initiated a campus-wide discussion about bottled water and drastically increased awareness about disposable bottle usage. Our slogans have penetrated the conscience of the student body and are now referenced in social media and other outlets. The change we have facilitated in our community is represented by the decrease in cases of water purchased by Dining Services

In order to ensure the continued success of our campaign, we will negotiate with Dining Services to make permanent reductions in the number of disposable bottled waters that are purchased each semester. We plan to bring our signed pledge sheets to Dining Services to provide evidence of the student body's support of our efforts. Coupling the reduction of sales from Dining Services with the social change already created, we hope to establish an atmosphere that is conducive to banning the sale of bottled water on our university's campus.

## References

<sup>1</sup><http://www.foodandwaterwatch.org/water/take-back-the-tap/>

<sup>2</sup><http://www.refillnotlandfill.org/>

<sup>3</sup><http://www.stopcorporateabuse.org/think-outside-bottle>

<sup>4</sup><http://www.snhu.edu/7831.asp>