“Let’s change this B.S.!”
Creating a Sustainable Beverage System at UVM

An Undergraduate Thesis Project by:

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Abstract
This thesis explores the Sustainable Beverage System campaign at UVM during the 2010-2011 academic year. The main goal of the campaign was to influence the university’s future beverage sourcing on campus, in light of the approaching expiration of a 10-year Sponsorship Agreement with Coca-Cola. As a principle organizer of the campus-wide movement, I have documented my efforts at multi-stage strategizing, along with some of the supplemental research important to understand the context of this campaign as well as the future recommendations and possibilities for UVM’s beverage system.

Key words
Activism, Student Organizing, Beverage System, Campus Sustainability, Bottled Water, Higher Education, Bottled Beverages, Plastic Waste, Coca-Cola

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Table of Contents

Preface ........................................................................................................ 6
  Personal statement and background
  What is a “Beverage System”? 

Introduction .............................................................................................. 8
  Sustainability in higher education
  Project goals
  VSTEP
  The Office of Sustainability

Literature Review ................................................................................... 12
  Bottled water history
  Flavored bottled beverages
  PET plastic
  Coca-Cola
  Global resistance
  Sustainability in higher education: green beverage procurement

Methodology ..............................................................................................19

Results and Discussion ........................................................................... 25
  Mapping the beverage system at UVM
    Coca-Cola Sponsorship Agreement
    UVM beverage market and sales findings
    Beverage miles, carbon footprint

  History of beverage activism at UVM

  Beverage system changes in U.S. institutions of higher education

  Student organizing strategies
    Sustainable Beverage System campaign foundation
    Social networking
    Campaign documents/feedback
    Public forums
    Resolution in Support of a Sustainable Beverage System
    Media Coverage
    Education

Conclusion .................................................................................................. 70

Bibliography ............................................................................................. 72
Appendices

Appendix I: Resolution in Support of a Sustainable Beverage System
Appendix II: Student Vision for a Sustainable Beverage System
Appendix III: Resolution Supporting a Ban on Bottled Water
Appendix IV: Bottled Water Consumption Deterrence Act
Appendix V: Coalition for a Responsible Coca-Cola articles
Appendix VI: Bring Your Own Bottle articles
Appendix VII: Sustainable Beverage System articles
Appendix VIII: VSTEP Earth Week Trivia Questions, April 2011
Appendix IX: Outreach email to relevant course instructors
Appendix X: Office of Sustainability newsletter, spring 2011
Appendix XI: Notable Coca-Cola Sponsorship Agreement Excerpts
Appendix XII: Panel Discussion Flyer (courtesy of Gretchenrae Callanta)
Appendix XIII: Student responses from panel discussion
Appendix XIV: SGA VSOP partial survey results, fall 2010
Appendix XV: Think How You Drink! Display facts, 2010
Appendix XVI: Wash U in St. Louis correspondence and materials
Appendix XVII: Email response from Brandeis University Sustainability Director
Table of Figures and Tables

Table 1. Beverage System Contacts at UVM, fall 2010-Spring 2011
Figure 1. Anticipated Contract Procurement Process as of April 2011
Table 2. U.S. Higher Ed Institutions Bottled Water Ban Contacts
Figure 2. 2010 University Budget Allocations from Coca-Cola Revenue
Table 3. Coke Sponsorship Provisions in Conflict with Sustainable Beverage System
Figure 3. Measures for a Sustainable Beverage System
Table 4. On-Campus Vending Locations with Highest Sales Volume, 2007-2010
Figure 4. 2010 Retail & Vending Beverage Sales
Table 5. Vending Machines Sales in “GreenHouse” vs. Unprogrammed Residence Hall
Figure 5. UVM Retail & Vending 2010 Beverage Mix by Brand
Table 6. Beverage Price Comparison Index in the Market Place by Delivery System
Figure 6. UVM 2007-2010 Retail & Vending Beverage Mix by Brand
Table 7. Beverage Miles from Bottler to Burlington, VT
Figure 7. UVM 2007-2010 Retail & Vending Beverage Mix by Type
Table 8. Sample of campus drinking water infrastructure audit
Figure 8. Vending Sales (cases) 2007-2010
Table 9. U.S. Colleges/Universities with Bottled Water Bans as of May 2011
Figure 9. Beverages sold on campus in 2010 by type and estimated beverage miles
Table 10. Potential Course Collaboration, 2011-2012 Academic Year
Figure 10. Student Vision for a Sustainable Beverage System Summary
Figure 11. Community feedback on Sustainable Beverage System
PREFACE

Personal statement and background

As a student at UVM, I have been predominantly involved in activism-related activities, dialogues, and networks. My first year on campus I was a member of the Integrated Social Science Program (ISSP), a residential living community and academic program with a curriculum strongly focused on social and environmental justice. It was through this program that I was introduced to one topic in particular that has remained since at the forefront of my consciousness: human use (and misuse) of water.

In an eye opening and disconcerting environmental anthropology course, I learned to see water in its various forms - from a simple elemental substance, to a symbol of beauty and purity, and finally as a tradable commodity. I also learned about private interests diverting public drinking water, encasing it in oil-based plastic bottles, and shipping it across the world, essentially selling back to people what once was free. These actions, I learned, could garner high carbon footprints and damage to ecosystems while often amounting in distrust, and in some cases privatization, of municipal water systems.

It was this course, and more specifically an “activism prospectus” assignment, which served as my impetus into a dual career as student-activist at UVM. In one caffeine-fueled all-nighter during my first semester, my group (among them, some of my future best friends at UVM) and I formed the idea to begin a campus campaign to rid our campus of what we considered to be the scourge of bottled water. What began as a mock campaign pitch for a group project would become essentially my life and main identity for the next three and a half years, as a handful of other dedicated students and I embarked on a movement to change behavior and policy within our university.

For the first two years, we waged a grassroots campaign – using education as a means of empowering members of the UVM community to reduce or completely eliminate their consumption of bottled water. We collaborated with other organizations on campus such as the Eco-Reps and the Student Government Association to try and change student behavior, voluntarily. Additionally, we identified some of the largest inhibiting factors to student behavioral change, and addressed them through means such as distributing free reusable water bottles on campus in exchange for a tap water pledge.

Our efforts during the first stages of the campaign, while not executed in vein, were suspended in part by particular clauses within the University’s sponsorship agreement with Coca-Cola. This document has bound the university for almost a decade to distribute a nearly exclusive array of beverage products manufactured by Coke and its subsidiary companies. These include various bottled water drinks and corn syrup based sodas offered in plastic, single-use containers. While this was never stated with total confidence, it was generally understood that the removal of the highest-selling beverage product on campus - bottled water - was not to be a likely outcome in the immediate future. We were directed instead to continue our efforts at student-focused education towards behavioral shifts, for the time being.
The beginning of my senior year marked the “final stretch” of the decade-long beverage contract, due to expire in less than two years from that point. This was a formative moment in the campaign: with an end to the restrictive contract in sight, we had finally entered into an era where the pleas we demonstrated to the administration could be taken seriously. Soon, the University’s actions might be less protracted, and more proactive – if we, as students, held them to their word.

**What is a beverage system?**

Throughout this paper I will refer to UVM’s “Beverage System” as well as its “Beverage Contract” or, more accurately, its “Sponsorship Agreement.” Readers should note that there is a critical distinction between these terms. The latter refers to an institutional arrangement between the University and a beverage-distributing for-profit organization. The “Sponsorship Agreement” is simply the document formally recognizing such a contract between the University and the Coca-Cola Bottling Company of New England as of July 1, 2002.

Conversely, the term “Beverage System” reaches beyond the scope of these items, to encompass all aspects of university beverage provision on campus. These include the beverages sold and distributed by both the sponsoring company as well as alternative companies, how they are produced, from where they are shipped, how they are stored before sale (such as in a vending machine versus a cooler or soda fountain) and in what type of container they are sold/distributed.

A campus beverage system vision also takes into close account non-contract matters affecting beverage sourcing on campus, such as behavioral psychology. For example, reducing campus waste output requires more than simply removing all offending disposable items from sale on campus. If this were an adopted policy, it would serve no more than to anger consumers of bottled beverages, many of whom would find their beverage demands met off-campus, resulting in the release of easily avoidable carbon emissions and the accumulation of a similar amount of plastic bottle waste to what we see currently.

On the other hand, a systemic approach to beverage sourcing on campus takes infrastructural planning and social engineering into as high of consideration as products. For example, it factors in the importance of strategically placed beverage fountains and open information flows as a way of providing an alternative hydration option to bottles from vending machines.

Another highly important aspect of a beverage system is the set of values it encompasses at its core. As a purely business-focused document, UVM’s current sponsorship agreement lacks mention of the social and ecological impacts associated with the products under its auspices. This promotes a view of students as no more than vehicles of profit, spending a calculable amount of money on the beverages put before them. It is through a beverage system map that the University can balance its finances and better meet the hydration and public health needs of its community while mitigating negative impact to social and ecological systems.
INTRODUCTION

Writer and environmental educator David Orr writes in his essay “What is Education For?” about the “power of examples over words” in schools. He posits, “students hear about global responsibility while being educated in institutions that often invest their financial weight in the most irresponsible things...What is desperately needed are faculty and administrators who provide role models of integrity, care, thoughtfulness, and institutions that are capable of embodying ideals wholly and completely in all of their operations” (Orr, 1991).

There are few better guiding words that could be used to both summarize and rationalize the Students for a Sustainable Beverage System campaign that began on the UVM campus in the fall of 2010. This movement was founded as an effort to bring to the surface prominent gaps between the mission of the University, and its actual practices, specifically in the realm of its beverage system.

According to the University’s Vision, Mission and Goals, UVM aspires to be “preeminent in [its] comprehensive commitment to liberal education, environment, health, and public service.” It also strives to “model the highest standard of ethical conduct, accountability and best practice,” (Vision, Mission and Goals, 2002). This declaration, along with Common Ground values of: Justice, Integrity, Respect, Innovation, and Responsibility, outlines a mission the institution aspires to promote through its internal operations and its interactions with other entities.

Showcasing a moral compass is one thing, while using this as a tool of orientation is another. UVM is nationally renowned as an institutional leader in environmentally sustainable practices and design. UVM has set a goal of reaching climate neutrality by the year 2020 (Thompson and Mika, 2010), and was amongst the initial institutions to sign onto the American College and University President’s Climate Commitment (ACUPCC) in 2008, a covenant that holds the University to many operational changes, including taking sizeable steps towards waste reduction on campus. (ACUPCC.org, 2007). Additionally, UVM boasts the nation’s first Gold-rated LEED certified student center, a well-developed Office of Sustainability and Eco-Reps network, and a university-wide composting program that is coveted by other schools. These all contribute to UVM’s high standing as an environmentally sustainable institution.

Sustainability as a formal movement in U.S. higher education can be traced back at least as far as the early 1990s, when the National Wildlife Federation released its Campus Ecology project, gathering data from over 800 schools and processing the “greening initiatives” occurring on roughly 80 percent of the campuses by the end of the decade. Even at this early account, UVM was distinguished as a leader with its constructive projects in bio-diesel solar panels, as well as a seminal activity in self-realization in the form of “Tracking UVM,” its two comprehensive audits of greenhouse gas emissions and other environmental impacts related to the University’s operations and initiatives (Wakefield, 2002).

At the time of the first assessment, UVM was one of “only a few” colleges and universities [in the U.S.] to “have had the gumption to put together comprehensive report cards” according to an interview with current Director of the Environmental Program Stephanie Kaza in 2002 (Wakefield, 2002). While the initial report
demonstrated areas where UVM excelled, such as in utilizing cleaner sources of energy and conserving water, there were undeniable weak points exposed in this report. Two of the most blatant areas in need of attention were those of campus waste output and electricity consumption, two totals that were measurably greater than during the previous decade. While the electricity usage seems to have puzzled many, the rise in waste generation can be attributed to the growing trend of disposable convenience goods, such as in food and beverage packaging, which really escalated in the last decade of the twentieth century.

According to UVM Sustainability Director Gioia Thompson, the data coordinator of the project and writer of Tracking UVM, “the university is not an island. [It operates] within the culture and standard of living of the U.S....[and is] part of a national trend in energy use and trash generation,” (Wakefield, 2002).

While some (like Orr) believe that it is the job of a university to transcend and influence national trends through progressive modeling actions, there is much to be said for understanding a problem before leaping into the planning for its remediation.

In discussing “Tracking UVM,” Kaza said: "You have to do these kinds of baseline audits [no matter what their public relations impact] to see what’s really happening. Then you can begin to actually transform the institution," (Wakefield, 2002).

**Project Goals**

The overarching goal for this project was to influence institutional policies surrounding beverage choices on campus to better reflect UVM’s social and environmental values. More specifically, the goal was to see decisions made to reduce the university’s environmental footprint such as drastically reducing the number of disposable bottles sold on campus and the distance that beverages must travel to reach the University, increasing the University’s commitment to social justice through maintaining as business partners companies engaged in ethical, sustainable practices.

A top priority, then, was to address the issue of beverage distribution on campus from a whole systems perspective, factoring data and applying solutions in a way that does not isolate variables, but instead looks to interrelated social, behavioral, economic, cultural and environmental components when envisioning a more sustainable campus beverage plan. To accomplish this, I aspired to lead a strong student movement, keeping alive the momentum from previous student activism campaigns in order to execute new strategic tactics.

Another goal for this project was to engage various community stakeholders through education and outreach, and serve as a conduit between all of these parties and the administration as a means of delivering input and recommendations for future moves. Lastly, I wanted to critically investigate the implications of innovations on other US college campuses addressing sustainability in beverage product decisions, building loose case studies which could potentially be used to help guide UVM through its own beverage system renovation.
As partners in this project I worked closely with two prominent campus organizations: VSTEP - the Vermont Student Environmental Program - and the Office of Sustainability.

**VSTEP**

Founded in 1988 by students with the agenda of “coordinating environmental activities and researching and implementing solutions” VSTEP carved a name for itself at UVM through its pivotal role in revamping solid waste management on campus and expanding the university’s recycling program (VSTEP, 2007).

According to the organization’s current charter (which features an updated name to fit the VSTEP acronym: Vermont Students Towards Environmental Protection), VSTEP’s main goal is to “to increase student awareness of prevalent environmental issues, and to promote and help institute sustainable university policies in order to maintain a socially- and environmentally-responsible institution” (VSTEP, Lynx, 2011). Through coordinating efforts with like-minded student organizations, campus governance bodies (such as the Student Government Association and the Board of Trustees) and various operational departments of the University (like Dining Services and Physical Plant), students in VSTEP have worked on various projects to enhance the efficacy of campus sustainability efforts, as of late putting the majority of their effort into a campaign to diminish the waste currently involved in beverage products sold and consumed on campus.

**The Office of Sustainability**

As the University of Vermont’s liaison between the environmental community and the administration, the Office of Sustainability “aims to foster sustainable development and promote environmental responsibility...by strategically bridging the academic activities of teaching, research, and outreach with the operations of the University” (Office of Sustainability, 2010). The general functions of the Office as they appear on its webpage include:

- Support organizational strategic planning for the "Environmental University"
- Track UVM's sustainability bottom line
- Educate and involve the campus community and the public at large
- Stimulate and select feasible ideas for sustainability related projects
- Create implementation plans and manage projects
- Celebrate campus successes

(Office of Sustainability, 2010).

In addition to holding monthly Environmental Forums, at which the most recent environmental initiatives on campus are announced and shaped by members of the campus community, the OoS has access to a number of resources and networks, including the Green Schools listserv and AASHE.

As the campus’ representative of environmental ethics to the Division of Finance & Enterprise Services under Richard Cate – the university’s administrative
unit which oversees such areas as financial services, administrative and facilities services, and capital planning and management (Division of Finance & Enterprise Services, 2010) – the OoS plays a critical role in defending social and environmental interests in realms where it would traditionally have gone ignored.

Such was the case nearly a decade ago, when the current beverage contract with Coca Cola was negotiated and signed upon. According to Gioia Thompson, in 2001 when the contract was being discussed, the level of concern surrounding issues of social and environmental responsibility in the beverage industry was just not present the way it is today. Bottled water was not nearly as ubiquitous of a product as it is today, and consequently the bottled water resistance movement had not yet mobilized (Thompson, 2010).

Aside from having a professional understanding of the contract procurement and negotiating process, the OoS harbors an intimate relationship with UVM’s environmental values and commitments. Originally founded 15 years ago by current Environmental Program Director Stephanie Kaza under the title of the Environmental Council, the office was designed as a structure to “fill a gap regarding a bridge between operations and academics on campus greening issues” (Office of Sustainability History, 2009). Under these terms, a project to enhance the environmental sustainability values as they are manifested in the beverage system at UVM – a structure currently responsible for the disposal of roughly 400,000 plastic bottles a semester, according to an article in the Vermont Cynic (Winter, 2010) – would fall under the originally slated goals quite perfectly.

With experience organizing complex, multi-stage programs like the Clean Energy Fund which involves the managing of a multitude of stakeholders around an intricate process with long-ranging results, the Office of Sustainability proved to be a nurturing environment to learn and enhance project management and organization skills.
LITERATURE REVIEW

The terms “Take back the tap,” “Kick the bottle,” and “Drink local” started to become well recognized towards the end of the first decade of the 21st century. In many cities, towns, and college campuses, public consciousness regarding the social and ecological scourge of the bottled water industry rose like floodwaters in a river. Yet despite pervasive messages from governmental and non-governmental organizations, public research agencies, scientists and celebrities informing the public of the known facts surrounding bottled water production (water depletion and contamination, grossly profiting companies and exploited land dwellers, petroleum-based plastic bottles that litter the oceans and leach toxins), an estimated 50 percent of Americans drink bottled water, one-third of those consuming it on a regular basis (NRDC, 2011).

Bottled water is just one chapter in a larger story of water commodified and diluted with health-threatening ingredients, suspended in disposable bottles, and shipped far distances from its original point of extraction. The majority of bottled beverages consumed in the U.S. are implicated with acts of ecological injustice, social inequality, and threats to public health, all in the name of the free market. While water resources are mismanaged in unquantifiable manners, this research focuses mainly on water used in association with the U.S. beverage industry.

Bottled water history
The history of commercialized beverages can be traced back to at least the early 19th century when, according to experts at the Columbia University Water Center, the owners of mineral baths and spas in some European towns began to encapsulate their medicinal waters and send them off with patients for extra profit. Eventually, more distant demands for healing waters and lucrative gains to travelling merchants led to an increased demand and a higher bottling rate at mineral water sources.

By the 1850s, a mineral water industry had formed in Europe, complete with regulation and trade laws. A few mineral water spas made larger names for themselves than others, including Evian, San Pellegrino, Perrier, ad Vittel. By the beginning of the 20th century, these still-operating brands had begun shipping their mineral waters across Europe and the rest of the world.

Bottled water was first regulated in the U.S. in 1938, when it was listed as a packaged food item in the Federal Food, Drug, and Cosmetic Act. However, water bottling in the U.S. began well before the first shipment of San Pellegrino ever crossed the Atlantic. The earliest known account of commercial bottled water in the U.S. is in 1845 by a man named Hiram Ricker. Ricker began bottling and selling untreated spring water flowing through the land on his family farm in Poland, Maine (one day to be owned by Nestlé waters under the name Poland Spring) (Royte, 2009).

With municipal governments taking charge of urban disease control through public water sanitization projects starting in the early 1900s, the market for bottled water was somewhat isolated to the wealthy class. There was a stagnant market for home and office deliveries of multi-gallon water cooler jugs (MSN, 2007) and scant
else. By the 1970s, imported mineral waters made a comeback in the U.S. beverage market starting with a large campaign by Nestlé owned French company Perrier. Americans were reportedly consuming 30 gallons per capita of soft drinks annually, and the health implications of these sweetened beverages were floating to the surface (MSN, 2007). The company played up the recent health craze crossing North America by sponsoring the New York City marathon in 1977 and marketing its carbonated water as a low calorie alternative to soft drinks. The French company reportedly launched a $4 million advertising campaign relying on the endorsement of mega celebrities like Madonna and Orson Welles.

This marketing apparently paid off, as $20 million were spent on Perrier in 1978, the first year that the beverage was officially distributed within the U.S., and by the very next year sales increased to $60 million. It is repeatedly asserted that the early demand for bottled water, aside from tapping into the concerns of a health-conscious populace, had created a monstrous trend, and a desirable status symbol. The instant fame of Perrier, helped Nestlé build a comfortable nest in the U.S. beverage market, where it subsequently launched a series of bottled water brads with regional operations across the country, from Poland Spring in the Northeast to Arrowhead in the parched southwestern states.

The peak of spring water

According to a 2010 study, “Bottled Water in the U.S.” compiled by the Beverage Marketing Corporation, bottled water sales in the U.S. increased ten times from 1984 to 2009, reaching a peak of 10 billion dollars by 2009, after which time industry sales began to drop significantly. Of the ten top-selling bottled water brands within the U.S., only one, Nestlé’s newest brand Pure Life, saw an increase in sales between 2008 and 2009, growing by a recorded 18 percent. Each of the other top U.S. brands saw a drop in their sales, top among these Coke’s Dasani, and Pepsi’s Aquafina (the companies lost sales revenue by 7.9 and 10 percent, respectively) (Food and Water Watch, 2010).

This trend is not so surprising considering the peak of a major economic recession in the U.S., as well as green marketing trends spreading distaste for bottled water across many demographics in the nation. What is puzzling then, is how one brand of bottled water managed to not only stay afloat, but gain a firm hold of the market during this period. According to the Beverage Marketing Corporation, Nestlé has three major tactics to thank for its relative success in a dwindling market: its water source, its marketing strategy, and its target audience for marketing (Beverage Marketing Corporation, 2010).

A shift to municipal water

The growing trend of bottled water sourced from municipal water supplies has been increasing the most steadily since 2005, the first year that Nestlé has been reported to have began selling bottled municipal water. According to a Natural Resource Defense Council study, the amount of bottled tap water sold over the period from 2005 to 2009 rose 66 percent, nearly seven times the rate of spring water sales during the same time frame. In fact, just Pure Life water itself grew in
sales by 320 percent over the five-year period studied – from 166.4 million to 698.8 million wholesale dollars (Beverage Marketing Corporation, 2010).

Brands like Pure Life, Dasani, and Aquafina have sprung out of bottling companies’ realizations that bottling municipally-sourced water is a much more lucrative business, as it allows sales to increase while cost of production remains stable or even decreases. Companies often save money on operations related to locating a source of freshwater (either in the form of a spring, or underground aquifer), installing extraction infrastructure such as boreholes and wells, and then shipping the extracted water to different regions of the country for bottling and distributing. There are also the costly and irritating disputes that many companies must deal with when their operations butt heads with disapproving citizen environmentalists and landowners in their regions of extraction.

Lastly, bottling municipal water allows for an unprecedented market expansion. Whereas the spring water business is limited by geographic placement of fresh water sources, tap water is available in any municipal region, meaning that bottling companies can establish more processing plants and distributing hubs than ever before. Local grocers can also more easily afford to shelf bottled water products that are local, as opposed to the previous market which included bottled water shipped far distances, depending on the region where a retailer was located. Furthermore, as the FDA’s regulations on bottled water exempt products for intrastate sale from testing, the opening of so many regional bottling ventures has eliminated much of the cost associated with testing and remediating the contents of some bottled water, at times resulting in a lower-quality product.

According to the Beverage Marketing Corporation, domestic sales of bottled water in the past fifteen years have had less to do with quality of origin (i.e. sourced from a mountain spring) and more to do with economics. This is exemplified in the case of Nestlé’s Pure Life, which has been able to keep costs lower than its competitors because of its large industry base and its internal production of plastic bottles, which keeps company expenditures relatively stable. Because of its low-end pricing, Pure Life has been awarded contracts with major suppliers including Burger King and Walmart.

**Trajectory of flavored bottled beverages**

“Soda water” has been consumed within the US dating back to the end of the 18th century. By 1835 the first bottles of soda water were produced and sold, soon followed by soda drinks such as ginger ale, root beer, and cola. These beverages were mainly consumed out of soda fountains after its patenting in 1819 by Samuel Fahnestock. Mechanization led to mass production of glass bottles beginning in 1899, and by 1913 the gas powered truck allowed for quicker and more secure delivery of consumer products. In the 1920s, the very first vending machines arrived, automatically dispensing soda into cups, a popular way to consume soda until the first appearance of retail aluminum cans in 1957. Minor modifications were made to the design of aluminum cans until a pivotal benchmark in the history of all bottled beverages (water included) was reached with the creation of the first PET (Polyethylene Terephthalate) plastic bottles in 1973. (Bellis, 2011), as well as rapid expansion of the entire bottled beverage market, including bottled water.
PET plastic & health risks

Aside from being used to create vessels that have perpetuated and in some cases facilitated the global shipment of water, there are numerous problems associated with the material itself. The production of polyethylene terephthalate (PET) plastic currently entails the use of chemicals including antimony, a contaminant known by international scientific and health agencies to pose acute and chronic health effects in humans and regulated in US tap water by the US Environmental Protection Agency (USEPA). Peer-reviewed scientific studies have detected levels of this and other chemical compounds that leached into the water in at least nine different brands of bottled water sold within the U.S. As PET degrades, the liquid inside a plastic bottle becomes more dangerous the higher it is exposed to light and heat. Once bottles are emptied they pose an even greater risk of releasing highly toxic chemicals such as ethyl benzene, antimony, and DEHA – this can occur after as little as one to two times of reuse (Paul, et al, 2008).

The Natural Resource Defense Council conducted a four-year review of water quality for both bottled and municipal water sources in the U.S. For this study they tested over 1,000 bottles of water and found that 22 percent of the brands tested had at least one sample with contaminant levels above the strictest state health code regulations for known persistent carcinogens (in other words, a substance with a low toxicity, that may result in fatal cellular mutations over a long period of exposure to the chemical). These findings, according to the NRDC, place regulated bottled water on a relatively even playing field with tap water in terms of quality control and risk in consumption (NRDC, 2010).

It is important to note that FDA regulations of bottled water only apply to interstate trade, and not to bottled water that is produced and sold within the same state. This means that 60-70 percent of bottled water sold within the U.S. has no absolute standard aside from an individual state, and no higher authority besides the state government is checking or enforcing these standards. A similar situation reportedly ensues within the FDA for bottled water labeled “carbonated” or “seltzer.” According to the NRDC report, the FDA regulations mention “vague general sanitation rules” that lack limits to contamination types and levels (NRDC, 2010).

While leaving regulatory actions up to a state may not seem like an entirely detrimental plan, it is inconsistent with the level of precaution that is federally mandated for tap water. The EPA requires that tap water be tested in government-certified labs for certain contaminants on average 100 times per month and that results be publicly posted, including violation notices which must be reported to state and local officials. The presence of certain contaminants (bacteria, pathogens and chemical compounds such as the cancer-causing phthalate) is grounds for fines and restrictions placed upon municipalities, while certain contaminants (such as E.coli, or any coliform bacteria, for that matter) are not allowed in public water sources in any amount.

On the other hand, most bottled water is tested only once a week by an internal employee of the company. The results of these tests are never required to be publicly available, nor are certain contaminants, strictly illegal in municipal water sources, regulated against in the case of bottled water (NRDC, 2010).
Production of PET

PET plastic poses health risks to more than just those consuming beverages from containers made out of it. The production of this plastic comes with a high price to social and ecological systems. Aside from the climate impact of petroleum extraction to procure the estimated 17 billion barrels of oil consumed each year in the production of plastic bottles, for the U.S. alone, (Pacific Institute, 2006), there are the high levels of dioxins (one of the highest cancer-causing compounds in the U.S.) that are released into the atmosphere through the production of plastics (Ecology Center, 2003). Public health studies have been performed in areas surrounding Formosa Plastics, a company bringing in $4 billion of revenue annually (Formosa, 2011) as one of the largest suppliers of plastic resins (including the polyethylene needed to produce PET) in the U.S. Residents near the plants in Point Comfort, Texas, and Baton Rouge, Louisiana, suffer disproportionately high levels of cancer and reproductive failures than national averages.

Recycling

Rather than attempt to deny the large-scale pollution created through the production of plastic bottles, beverage companies opt to distract consumers from ostensible problems with their products by redirecting their attention to more positive steps that they are taking to reduce the impact of production. This is clearly demonstrated through Coca-Cola’s “Keep it Going. Recycle” campaign, which has created professional Youtube videos and even chosen cities to “sponsor” with Coke-branded recycling bins, showing its commitment to the recycling of its products and confusing consumers as to the difference between “reusable” and “recyclable” items (Clinton, 2009).

The reality is that the PET plastic in a bottle that once contained a beverage will never again see the light of day as a beverage bottle. Health codes set by the FDA make it so that materials that were once used in food or beverage containers may never again be considered “food grade.” Rather, the plastic bottles that make it to a recycling plant will generally be “downgraded” – a term describing the transformation of products into lower-grade materials such as the rayon and polyester fabrics which are used to create inexpensive, short-lasting carpets and clothing items (Rademacher, 1999).

For plastic bottles that claim to be made from “recycled materials,” this claim comes with an important caveat. In bottle-producing factories, the defected or misshapen items are melted down to re-enter the bottle production process, and are considered “recycled” materials by production standards. However, due to the chemical composition of PET plastic, once it endures the heat levels to be formed into a plastic polymer, it loses its solid integrity, and therefore can only be integrated in a small proportion to new material in a finished bottle. To date, only ten percent of a plastic bottle made with “recycled material” actually contains “recycled” content (Rademacher, 2009).

Even with widespread knowledge of recycling in the U.S. and recycling plants in nearly every state, the average recycling rate for plastic bottles consumed within the U.S. each year remains 20 percent. With this estimation, 175 billion plastic bottles, according to Recycling Revolution each year are left to enter landfills (where
they contribute to the release of methane gas) or incinerators (releasing highly toxic chemicals and carcinogens). Over 38 billion bottles each year make their way to the ocean, contributing to toxic waste piles like the Great Pacific Trash Vortex, a floating mass of plastic waste two-times the size of Texas, contributing to the death of millions of marine life, and health risks to humans consuming seafood that have digested persistent chemicals.

Unlike many other bottled beverages, plastic water bottles currently have no deposit value, greatly diminishing the incentive to return them to a recycling location.

**Global backlash to bottled beverage corporations**

Resistance to the actions of companies bottling water for a profit has come at many tiers. From grassroots demonstrations against the privatization of water resources in cities across the world (such as the well-known Cochabomba, Bolivia), to non-profit organizations focusing campaigns against bottling companies (most prominent are Corporate Accountability International, the Polaris Institute, and Food and Water Watch). In the governmental realm, state governments (including Vermont in 2011) have issued bills against the use of state funds for bottled water, and the taxing of citizens who purchase it (Toronto, Canada, and Chicago, Illinois). Some towns (like Concord, Massachusetts) and entire cities (Bundadoon, Australia) have undertaken beverage activism, banning bottled water from sale within municipal boundaries.

**Bottled water activism green procurement trends in universities**

The Polaris Institute has also been a leading player in the strong movement over the past six years to ban bottled water sales and provision in Canadian universities. PI, along with the Canadian Federation of Students and the Sierra Youth Coalition, have played a significant role in raising student awareness and concern about bottled water, and precipitating the bottled water restrictions documented on five university campuses, eight school boards, four municipal associations and 76 municipalities. One of the many actions initiated by this coalition includes the “Bottled Water-Free Zones” campaign spreading across Canadian campuses that have not yet made the institutional decision to ban its sales, but which feature a campus community active around the cause and wishing to impact bottled water consumption in a significant way.

This campaign was launched in 2008 on World Water Day – March 22. Already there have been nearly 60 Bottled Water-Free Zones established on at least 16 Canadian campuses; many of those universities, such as the University of Winnipeg, began by collecting endorsements from various department wings and on-campus dining facilities, eventually gaining enough momentum to steer their administration towards the ultimate decision to cut ties with bottled water on an all-campus level (Harden, 2008).

Most recently, the coalition was responsible for organizing a Bottled Water Free Day on March 11, 2010, to “raise awareness about the negative impacts of bottled water” (Polaris, 2010). This day involved events on over 60 university and college campuses across Canada, as well as an announcement that Ryerson
University would become the most recent on the list of Canadian schools to discontinue the sale and distribution of bottled water (Polaris, 2010).

The actions in Canadian higher education may date back further than documented cases of anti-bottled water initiatives in the United States, but the movement is far from inactive within U.S. universities. Spearheading the movement in 2009, Washington University in St. Louis began a partial campus-wide ban on the sale and provision of bottled water from all “vending machines and campus eateries” as well as events and meetings (Daues, 2008). The university’s message of explanation cites environmental impacts of bottled water such as “significant energy and waste issues” but it only helped the cause that St. Louis tap water was rated number one in the country by the U.S. Mayor’s Conference in 2007 (Daues, 2008).

What began with one university has been spreading relatively quickly to an assortment of other universities across the U.S. In the fall of 2010 both Seattle Brown University in Providence, Rhode Island, made the commitment to social and environmental responsibility through curtailing bottled water sales and distribution on those campuses (Kang, 2010).

There are currently seven U.S. universities with official bottled water bans, and twice that number with partial, or department-wide bans. UVM can find plenty of company as one of the 30-something U.S. universities with a campus awareness-raising plan to reduce dependence on and sales of bottled water (AASHE, 2010). The top reason cited for the inability of universities with strong student movements to end the sale and provision of bottled water is a corporate contract entanglement (Harden, 2008) and (Kang, 2010).
METHODOLOGY

A.1 Mapping UVM’s beverage system

I pieced together much of my UVM beverage system information* through a mixed-methods investigative approach utilizing email correspondence, dialogues and information sessions held with various mid-level to upper-administrative staff members of the University. Below is a table describing the extent of these contacts. (*Note: certain data sets featured totals extracted and manipulated/extrapolated by my provider in order to come to a useful figure, and as such are neither official figures nor endorsed by their original producer/provider).

Table 1. Beverage System Contacts at UVM, fall 2010-spring 2011

<table>
<thead>
<tr>
<th>Name</th>
<th>Position at UVM</th>
<th>Mode of Contact</th>
<th>Information/documents provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gioia Thompson</td>
<td>Sustainability Director</td>
<td>Personal meetings, Group discussion, document review Fall 2010-Spring 2011</td>
<td>•Coca-Cola sales data at UVM •Campus water fountain data •Total beverage sales at UVM •Revenue-sharing from Coke agreement by destination</td>
</tr>
<tr>
<td>Erica Spiegel</td>
<td>Recycling and Solid Waste Manager</td>
<td>Email correspondence and meetings, Fall 2010-Spring 2011</td>
<td>•UVM recycling and solid waste removal data •Retail beverage fountain data, bottled beverage origins •Beverage product miles</td>
</tr>
<tr>
<td>Pat Brown</td>
<td>Head of Student Life</td>
<td>Email correspondence and meeting, Spring 2011</td>
<td>•Feedback on campaign documents and survey methods/questions</td>
</tr>
<tr>
<td>Richard Cate</td>
<td>Vice President of Finance</td>
<td>Organized meetings and Panel Discussion, Spring 2011</td>
<td>•Report of administrative feedback on initiative •University financial situation</td>
</tr>
<tr>
<td>Ralph Stuart</td>
<td>Campus Sustainability instructor, Environmental Safety Facility</td>
<td>Interview, March 2011</td>
<td>•Campus sustainability information - current movement and historical context (UVM and national)</td>
</tr>
<tr>
<td>Natalie Guillette</td>
<td>Procurement Director</td>
<td>Online (through GT) Spring 2011</td>
<td>•Exclusive Sponsorship Agreement between the Coca-Cola Bottling Company of New England (CCCNE) and UVM (2002-2012) •History of beverage purchasing at UVM (through GT)</td>
</tr>
</tbody>
</table>
**Exploring the history of activism at UVM**

In planning effective campus organizing strategy for the sustainable beverage system initiative, I found it important to understand the history of student-led initiatives on campus focused on supplying more socially and environmentally ethical beverages at UVM.

The earlier movement into which I looked focused on ending the presence of Coca-Cola on UVM’s campus for the company’s poor social and environmental records. I studied the organizing of this campus group, called the Coalition for a Responsible Coca-Cola (CRC), through personal interviews with students on campus and email correspondence with the graduated students heavily involved in the campaign during their time at UVM. I also studied physical and online artifacts left from the now inactive organization. These included posters, display pieces and tabling materials discovered in the SGA club storage space, as well as archived emails from their listserv which are publicly available through the UVM website.

The other campaign I revisited for my research was one that I helped to initiate and was heavily involved in organizing during my first few years at UVM. This was the Bring Your Own Bottle (BYOB) campaign, focused on ending the sale and distribution of bottled water at UVM. For this research I went through more archived materials – emails and documents saved on my computer, as well as campaign materials used by the other students and myself over the years of tabling and outreach. This part of my research involved a lot of self-reflection, as I considered the influential events that led me into the campaign and the impact of these shaping forces on both the direction of the movement as well as my personal growth as an organizer.

**Case studies from other institutions**

During this campaign I was interested in educating myself about the role of students in the sustainability movement across US college campuses, specifically regarding campus beverage system. I used the AASHE (Association for the Advancement of Sustainability in Higher Education) website as a jumping point to assess the beverage activism movement at other Universities. AASHE provided a list of schools involved, but lacked in-depth information. I performed further investigation into these programs through general online searches and contact with several campus organizers of bottled water bans at other universities. Paige Kerstein, an undergraduate intern with Corporate Responsibility International, contacted me early in the fall semester of 2010 through my status as a campus bottled water ban organizer, and became a helpful contact, especially as a link to other college activists. Through email, phone calls, and in-person interviews, I questioned these individuals about the campaigns at their schools and their personal roles. Below is a table providing an overview of my contact with these campus representatives.
Table 2.  
U.S. Institutions Bottled Water Ban Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>School</th>
<th>Date First Contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deborah Howard</td>
<td>Washington University in St. Louis</td>
<td>March 2011</td>
</tr>
<tr>
<td>GRae Callanta</td>
<td>Seattle University</td>
<td>Fall 2010</td>
</tr>
<tr>
<td>Paige Kerstein</td>
<td>Brown University</td>
<td>Fall 2010</td>
</tr>
<tr>
<td>Tyler Hess</td>
<td>Depauw University</td>
<td>March 2011</td>
</tr>
</tbody>
</table>

Student organizing strategies

**Building a coalition**

Building a campus coalition with a unified mission was a very important component of the sustainable beverage system campaign. Most of the members recruited to work on this campaign came from the student organization of which I was already a co-leader, Vermont Students Towards Environmental Protection (VSTEP). Club members and I identified other campus organizations with missions related to sustainability and social and ecological justice. Some of the groups we contacted included: the Office of Sustainability; the Eco-Reps program, a group of students hired by UVM to teach their peers about sustainable living practices while living on campus; Students Stand Up (SSU), a student movement in resistance to the downsizing of public education and corporatization of the University; and our campus chapter of Slow Foods, an international movement re-cultivating a local, organic and “real” food culture. This outreach occurred in the form of emails, personal communication, and VSTEP members attending other clubs’ meetings. I also organized three coalition meetings in September, October, and November of 2010.

**Envisioning goals and values**

My co-leader, Emilyn, and I held several visioning sessions with the members of VSTEP to decide as a group what were the most important values shared by our group, and to brainstorm how the campaign would move. Through these sessions, everything from a campaign name, to tangible goals and strategies came to light. Emilyn and I facilitated these meetings, although we encouraged other members of the group to come equipped with new ideas to share. In order to work collectively, we used a specific method of consensus decision-making for many, though not all, of our decisions.

**Social networking**

The Sustainable Beverage System campaign built name-recognition by flyering and utilizing several online mediums including: the VSTEP page on the UVM Lynx site (an online network linking UVM students and recognized student clubs at UVM), Tumblr, a free blog site, and the social networking site Facebook.
Drafting documents and campaign materials

A large part of the work I did as student leader was the drafting of various documents for our campaign. The two main documents composed during this campaign were the Student Vision for a Sustainable Beverage System, and the Resolution in Support of a Sustainable Beverage System. For these documents and other, minor ones, I tried to factor in all of the dialogues held between club members and the ideas we discussed as a group, and compile them into one working document. I took these back to be edited and modified by the other VSTEP members, and also sought out feedback from other members of the UVM community through personal and group dialogues, social networking sites, and informal surveying and tabling events, before they were considered complete and representative of most of the movement’s followers.

The main method of sharing the documents was through tabling in open areas on campus. VSTEP attempted to have a tabling presence at least four times a week for the last two months of the spring semester. At this table the club displayed VSTEP’s Vision statement, along with other educational materials with information about bottled beverages, Coca-Cola, and UVM’s beverage contract and institutional values. There was also a sheet to collect the contact information of individuals interested in either working with VSTEP or just staying informed about upcoming events related to the beverage system campaign.

As the purpose of drafting a resolution was to have it be passed as official SGA legislation, continued contact with the members of SGA was imperative in working within the SGA constitution and with the entire body in a democratic way.

Presentations and Forums

Throughout the semester I gave presentations about the Sustainable Beverage System campaign both on my own and with members of VSTEP. The following headings are a list of these presentations:

Undergraduate course engagement

Over the winter recess (2011-2012) I contacted nearly a dozen faculty members teaching spring courses with an environmental sustainability/policy theme, and especially those with a Service Learning component. I presented the opportunity of collaboration with their students on the sustainable beverage system initiative as a way to diversify participation and cover more ground and tasks, while offering a unique learning experience for the students to be able to directly apply course objectives to a very salient and local issue of campus sustainability.

Environmental Forum

The February Environmental Forum, a monthly gathering organized by the Office of Sustainability as a venue for announcements and updates on various environmental initiatives on campus, was one of the large public outlets of the campaign. I put together a powerpoint and presented findings from the beverage system, along with Gioia and two other members of VSTEP.
**Student Government Association**

I attempted on my many occasions throughout the campaign to collaborate with the Student Government Association. These included attending several senate meetings and presenting on public forum, attending committee meetings to assess how VSTEP and SGA could work together on various tasks, and holding meetings with individuals from student government, including committee members, chairs, and members of the executive committee, to strategize.

**Staff Council**

One of the largest forms of outreach to the non-student and faculty population at UVM was VSTEP’s presentation in late spring of 2011 at the Staff Council meeting. A few members and I informed them about our campaign and invited them to offer questions, feedback and advice.

**Panel discussion**

The largest public outreach event held during the year of working on the sustainable beverage system initiative was an open panel discussion held in the late part of the spring semester entitled ‘UVM’s Next Beverage Contract: Our Wallets, Our Health, Our Integrity.” The panel was organized by the members of VSTEP and I, and included the following five officials from the UVM/Burlington community: VP of Finance for UVM Richard Cate, UVM Sustainability Director Gioia Thompson, the College of Community Development and Applied Economics Faculty Member Gary Flomehoft, Living/Learning Program Director and Seattle University alum Gretchenrae Callanta, and Burlington Water Quality Department Representative Tom Dion. The panel was moderated by Larry Forcier, former Dean of the Rubenstein School of Environment and Natural Resources and an environmental law and policy expert.

I did much of the organizing for this panel including securing most of the panelists and the moderator, brainstorming topics and agenda, and organizing publicizing for the event. I also delivered a closing speech at the panel, encouraged and collected feedback from audience members, and helped to set up, take down and generally ensure that the entire event ran smoothly.

**Media coverage**

The Sustainable Beverage System campaign received media coverage by essentially every major campus media source during the year, including both of the student news publications, the Vermont Cynic and the Water Tower, the campus radio station, WRUV, and the Office of Sustainability’s monthly campus newsletter. For some of this coverage I contacted the media sources directly seeking publicity (UVM TV), in some cases we used internal connections (such as a member who worked on both WRUV and the Water Tower) and in other cases I was contacted by reporters seeking details on certain developments (the Vermont Cynic and the Office of Sustainability).
**Educational campaign**

The majority of the Students for a Sustainable Beverage System’s educational campaign consisted of our public outreach events such as tabling, petitioning, forums and presentations. I also developed several educational materials during the campaign, some on my own and others through collaborating with VSTEP members, including a Think How You Drink poster board with facts about Coca-Cola, bottled water, and global and national movements, a Frequently Asked Questions sheet about the Sustainable Beverage System campaign, an interactive trivia set on bottled beverages and plastic waste. Several of the materials I created in previous years during the BYOB bottled water campaign were also useful, including the SGA Resolution in Support of a Bottled Water Ban, and several fact sheets about bottled water.
RESULTS

Mapping the beverage system at UVM

**Contract process**

The following diagram maps the institutional contract procurement process. It begins with the drafting of a Request For Proposal (RFP) – a document that outlines the services and benefits sought by the University from a contending business partner, during the summer of 2011. By May 2012, UVM must have a new plan for beverage distribution on campus before the June 2012 expiration of the 2002-2012 Sponsorship Agreement with Coca-Cola.

*Figure 1*  *Anticipated Contract Procurement Process as of April 2011*

- **Spring 2011**
  - Formation of Beverage Contract Committee (includes representatives from each campus constituency group)

- **Summer 2011**
  - Committee meets to draft Contract Request for Proposal (RFP) + campus survey questions for the fall

- **Early Spring, 2012**
  - Contract negotiation ensues between UVM and selected beverage provider

- **Sept. 2011**
  - Campus survey released and processed

- **Oct. 2011**
  - Company selected and shared with BOT at tri-annual meeting

- **May 2012**
  - Final Beverage Contract measures finalized with BOT approval

- **June 2012**
  - UVM enters new beverage contract
Discussion of contract process

The conventional contract procurement process could serve as a major inhibiting factor to the University truly transitioning to a more sustainable beverage system. There is first and foremost the issue raised by forming a “contract committee” in the spring of 2011. This action accepts that a new contract is automatically in question, rather than thinking more broadly and questioning the procedural and cultural status quo at hand. This assumption limits change to only measures that can fit within the parameters of a corporate beverage contract, rather than questioning if the University truly requires a corporate contract to meet its beverage needs.

Furthermore, even a dialogue that results in progressive changes in a new beverage contract will not guarantee University-wide changes. For instance, a committee could negotiate with a contending company to create a contract clause stipulating no bottled water be delivered by that company to the University during the negotiated contract lifetime. What would this mean for those locations on campus that are not managed by University Dining Services (such as those owned by the UVM Bookstore and Henderson’s Café)? Likewise, the exclusive beverage contract with Coca-Cola did allow for alternative companies’ products to comprise 20 percent of beverages sold on campus – if change was sought only through the measures of a sponsorship agreement, then what would prevent the managers of the dining locations to stock one-fifth of shelf and cooler space with highly demanded bottled water, or any other product deemed offensive under the arrangements of a new beverage contract?

The kind of holistic changes required for a more sustainable beverage system can only be achieved through a whole-systems approach. This might be in the form of a beverage system policy committee or another similar version of a taskforce charged with considering university-wide policy recommendations in regards to beverage supply on campus.

Coca-Cola Sponsorship Agreement

The current Sponsorship Agreement between Coca-Cola and UVM was signed into effect in July 2002. As stated in a University Communications announcement on September 5, 2003:

“Coca-Cola’s near-exclusive rights translate to exclusive beverage vending, exclusive beverage providing in dining facilities operated by Sodexho, and 80 percent of the cooler and shelf space in university convenience stores and the University Bookstore. Sodexho will determine the make-up of the remaining 20 percent. The exclusivity does not apply to fresh brewed coffee and tea, cider, milk, freshly blended smoothies and fresh squeezed juices. As a result of the agreement, Coca-Cola will have sponsorship acknowledgement in athletic programs and exclusive beverage sponsorship acknowledgement in UVM athletic facilities. No competitive beverage trademarks will be displayed on campus. This also means no competitive beverages may be served at university sponsored events.” The announcement also states that the University will
receive a total of $4.3 million over the 10 years of its term, and that “money was the determining factor in choosing Coke as a sponsor,” according to David Martin, the then-director of purchasing at UVM. According to the announcement, Pepsi-Co had offered UVM only $4 million as a sponsorship fee (“UVM Receives First Payment from Coca-Cola Agreement,” 2003).

**2010 University Budget Allocations from Coca-Cola Revenue**

In the fiscal year from 2010-2011, the University received a budgeted total of **$482,000**. The following (written in an email by UVM Budget Director Ted Winfield, as shared by Gioia Thompson) explains the 2010 budget allocations:

- **Student Financial Aid:** **$157,000** “used to support financial aid” “not directed to a particular scholarship or student” “None is used for athletic scholarships”

- **Student programming:** **$78,500** (funds go to the Career Services office)

- **Athletics:** **$108,000** (overall Athletics budget, including campus recreation and intercollegiate athletics)

- **University Operations:** **$138,000** (overall University general fund budget, with a small amount covering CatCard services costs)

Figure 2  **2010 University Budget Allocations from Coca-Cola Revenue**

This chart uses data and information provided by University Budget Director Ted Winfield to display the allocation of funds towards UVM programs from Coca-Cola sponsorship in 2010. With the $482,000 earned in 2010 from Coca-Cola sponsorship, the University made decisions as towards which programs it would be used. (Thompson, 2011).
Table 3  *Coca-Cola Sponsorship Provisions in Conflict with Sustainable Beverage System Resolution*

<table>
<thead>
<tr>
<th>Type of clause</th>
<th>Major Stipulation/s</th>
<th>In conflict with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-sharing program</td>
<td>UVM to receive $4.3 mil over 10-years and to apply funds to student/campus programs at will</td>
<td>VII. Ethical Funding</td>
</tr>
<tr>
<td>Student-to-vendor ratio</td>
<td>Bottler’s right to maintain student: vendor ratio of 100:1 through addition of vending machines</td>
<td>III. Shipment and Waste Reduction; IV. Prudent Vending</td>
</tr>
</tbody>
</table>
| Exclusive sponsorship       | - Up to 20% of retail/vending space may be non-Coke products (milk, cider, coffee) but must be displayed in least-marketable area  
- No ‘competitive products’ sold  
- Trademarks for alternative companies may not be used  | I. Local community development  
V. Anti-monopoly  
VI. Corporate Responsibility  
VII. Ethical funding |
| Corporate promotion         | - All beverages must be consumed in Company provided cups;  
- Company has license to use University marks/promote UVM sponsorship royalty-free and without prior consent                                                                                                  | V. Anti-monopoly  
VII. Ethical funding  
VI. Corporate Responsibility |
| Reasonable sales mandate    | University to be fined if implicated with 10% drop in Company revenue from on-campus sales for 120 days                                                                                                         | III. Shipment and Waste Reduction; IV. Prudent Vending  
VI. Corporate Responsibility |

Table 3 describes the significant stipulations associated with various clauses extracted directly from UVM’s Coca-Cola Sponsorship Agreement from 2002-2012. All clauses were chosen based on their potential to inhibit the adoption of certain listed Measures for a Sustainable Beverage System (Figure3, below), the seven main facets composing the foundation of the Resolution in Support of a Sustainable Beverage System (see appendix) **For complete excerpts from Sponsorship Agreement see appendix.**
I. Local Community Development: Supporting local, independent companies

II. Local Resources: Providing whenever possible locally sourced water and other beverage ingredients in replace of non-local equivalents

III. Shipment and Waste Reduction: Reducing campus waste output and beverage footprint through phasing-out distribution of beverages in single-use bottles

IV. Prudent Vending: Reducing energy usage through the reduction or elimination of unnecessary beverage vending machines

V. Anti-monopoly: Promoting buyer’s consent of free-market choices for students bound to the beverage options offered at UVM through their mandatory meal-plan

VI. Corporate Responsibility: Promoting as a public University parties involved in ethical practices; disassociating from those charged with harmful practices

VII. Ethical Funding: Rethinking the usage of funds derived from a company with questionable business practices for student educational loans and programs

Figure 3 highlights some of the most important aspects of a sustainable beverage system, as deemed so in the Resolution in Support of a Sustainable Beverage System See Appendix I for full resolution

Discussion of sponsorship measures

UVM does not derive a significant amount of its yearly operating budget from revenue through the sponsorship agreement with Coca-Cola. Out of an estimated annual operating budget of $480 million, just over one percent came out of the Coca-Cola arrangement in 2010. It is also important to note that Coca-Cola is not directly contributing to student scholarships. The money allocated from sponsorship revenue to financial aid contributes to the larger pool of money for student loans. While this money itself is certainly not insignificant in terms of the programs it supports, the assertion was made by VP of Finance Richard Cate himself that UVM can find alternative revenue sources to those from an exclusive contract with Coke (Cate, 2011).

Not only can UVM find alternate funding sources, but it may have to in the future should revenue-sharing prospects dwindle. According to Gioia Thompson, the trend in institutional contracts with other companies is such that the amount of money offered in exchange for contract and sponsorship rights has been on a decline in the wake of the 2008 economic recession. There is no way of knowing before corporate proposals arrive in the fall of 2011 what sort of offers will be made by Coca-Cola and various other contenders in exchange for exclusive rights and promotional opportunities (Thompson, 2011).
Overall, UVM must decide if an exclusive sponsorship agreement is ethically and financially prudent to the overall wellbeing of the University and greater community. As a public institution founded on a mission to serve the state of Vermont and educate responsible leaders, there lies an undeniable rift between the services being delivered to students, and the way in which they are funded. This will lead and already has led to an inevitable dissonance in the hearts and minds of those encouraged to develop and think critically during their time at UVM. Even if future revenue from a sponsorship should prove to be reliable significant, the question of ethics is undeniably large and must play a greater role in decision-making to come.

**UVM beverage market and sales findings**

The following section features Coca-Cola beverage retail and vending sales data from 2007-2010, provided by UVM representative for the Coca-Cola Bottling Company of Northern New England (CCNNE), David LaRose. Gioia Thompson and Erica Spiegel were the primary analysts of this data, organizing and processing it into accessible pieces. The charts and much of the data used below feature many of their efforts.

**Overview of sales**

An estimated **1,100,000 single-serving bottles*** were sold on the UVM campus between spring and fall 2010. About 21 percent of these, **230,000 bottles**, contained unflavored, non-seltzer water. Roughly **243,000** of the bottles sold contain carbonated soda or Moxie energy drink. Together, bottled water, soda, and Moxie comprised just about 50 percent of the bottled beverage sales on UVM’s campus.

*This and other volume-of-sales figures are the result of data extrapolation by Erica Spiegel, and were not endorsed by Coca-Cola.
Figure 4

![2010 Retail & Vending Beverage Sales](image)

(Thompson and Spiegel, 2011)
Total beverages sold by type from retail and vending locations in cups and bottles

Figure 5

![UVM Retail & Vending 2010 Beverage Mix by Brand](image)

(Thompson and Spiegel, 2011)
A detailed breakdown of Coca-Cola beverages sold on campus in 2010.
Figures 6 and 7 demonstrate the four-year trends in beverage purchasing on-campus from 2007-2010 (from left to right). Most notable: while a significant decline in sales of Dasani water (as shown in Figure 6, top) manipulates the overall trend in bottled water sales (Figure 6, above), it serves to note that more “specialty” waters such as Smart Water have seen a drastic rise in the last three years of sale (Figure 6). Similarly, soft drink sales are altogether dropping, while trends seem to be moving towards the alternative beverages Powerade and Honest Tea (Figure 7).
Vending Sales Recent Trend

Figure 8

Figure 8 represents total beverage volume (in cases, where one case holds 22-24 bottles) sold from all vending machines on campus over four years.

Table 4  
*On-Campus Vending Locations with Highest Sales Volume, 2007-2010*

<table>
<thead>
<tr>
<th>Building (#machines)</th>
<th>Campus</th>
<th>Sales ’07*</th>
<th>Sales ’10*</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin/Academic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bailey/Howe Library (1)</td>
<td>Main</td>
<td>456</td>
<td>542</td>
<td>19%</td>
</tr>
<tr>
<td>Old Mill (2)</td>
<td>Central</td>
<td>887</td>
<td>539</td>
<td>-39%</td>
</tr>
<tr>
<td>Patrick Gym (3)</td>
<td>Athletic</td>
<td>769</td>
<td>479</td>
<td>-38%</td>
</tr>
<tr>
<td>Waterman (3)</td>
<td>Central</td>
<td>616</td>
<td>451</td>
<td>-27%</td>
</tr>
<tr>
<td>Health Science Research</td>
<td>Main</td>
<td>399</td>
<td>305</td>
<td>-24%</td>
</tr>
<tr>
<td>Residence hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harris Millis (2)</td>
<td>Athletic</td>
<td>928</td>
<td>498</td>
<td>-46%</td>
</tr>
<tr>
<td>Wing Davis (2)</td>
<td>Redstone</td>
<td>591</td>
<td>440</td>
<td>-26%</td>
</tr>
<tr>
<td>MAT (2)</td>
<td>Athletic</td>
<td>566</td>
<td>427</td>
<td>-25%</td>
</tr>
<tr>
<td>Patterson (2)</td>
<td>Redstone</td>
<td>393</td>
<td>401</td>
<td>2%</td>
</tr>
<tr>
<td>Chittenden (2)</td>
<td>Central</td>
<td>758</td>
<td>370</td>
<td>-51%</td>
</tr>
</tbody>
</table>

(data extracted from Vending Data, Spiegel, 2011)

*Sales data in terms of number of cases sold, where 1 case generally contains 22-24 individual disposable bottles, for the five areas of highest sales volume amongst administrative/academic buildings and residence halls.
In analyzing the detailed data that distinguishes between locations (Table 4), it is worth noting that amongst vending machines located in residential buildings, only five machines saw an increase in sales from 2007-2010. The only vending machines in a residential hall to see a significant rise in sales volume over the studied time frame (those found in McAuley Hall on Trinity campus) still sold a beverage volume (183 cases in 2010) over three times less than the 2010 sales at the highest-selling spot, Harris Millis. Similarly, rises in vending sales in academic/administrative buildings were strictly the anomaly; for instance, the only non-residential location to experience a positive sales trend from 2007-2010 was the Bailey/Howe library.

Discussion of sales mapping

**Retail and vending sales, 2010**

This data is significant in several ways. Figures 4 and 5 seem to demonstrate that a University-wide ban on just bottled water sales could greatly diminish the number of disposable bottles consumed in one year on campus. Similarly, reducing or diminishing the number of bottles of soda sold on campus each year could have drastic effects on the waste from and shipment of this consumer good.

These observations on their own ignore the behavioral aspects pertinent to beverage system change, including the very important consideration into how individuals who consume bottled beverages on campus might meet their beverage needs and desires in the absence of bottled water and soft drink access in the future. For instance, would there be an increase in certain juices and specialty drinks such as Fuze and Honest Tea (which, as demonstrated in figure 6, *Beverage Purchasing Trends Over Time*, are currently on the rise in consumption levels on campus)? Would more people migrate off campus to purchase the packaged beverages of their choice? These types of questions are addressed later on in a section on survey data.

**Retail and vending sales trends by brand, 2007-2010**

One crucial point in this matter is that both water and carbonated soft drinks are not only the most frequently sold beverages on campus, but are readily available in fountain form, unlike other beverages which currently have no alternative to their pre-packaged delivery. This fact alone, and coupled with the fact that vending machine sales, which solely distribute packaged beverages, are decreasing could lead one to hypothesize that there is hope in a fountain beverage future at UVM, where a higher proportion of beverages would be purchased and consumed in reusable cups or containers straight from a water or beverage fountain.

The data from both Figures 6 and 7 (4 year bar graphs) paint a slightly different picture. While bottled carbonated soft drinks and Dasani bottled water are dropping in sales, there is still a growing market for other beverages on campus, mainly those in the RTD (ready to drink) tea category, like Honest Tea, which rose in sales from 10,176 bottles in 2009 to 81,600 bottles in 2010. Larger speculations about this trend are in the literature review.
Vending by location

Lastly, taking into consideration the specific sites of those vending machines with the highest sales volume per year lends another critical angle to the situation. For instance, the one case of rise in sales in a residence hall setting is the Trinity campus McAuley Hall, which saw an increase between 2009 and 2010 of 38 to 183 cases sold from its two vending machines. This data coincides with the establishment of McAuley as a residence hall, housing for the first time mostly first year students in an area of campus remote from dining halls and other dining services retail sites.

As for non-residence hall vending machines, the case of rising sales in the Bailey/Howe library is a unique situation, in that the single vending machine is located in the Cyber Café – which five days a week becomes the one section of the library kept open for the entire night, as well as the only location on campus universally accessible to UVM students twenty-four hours a day during the week. As many students find themselves in the Cyber Café (which after reasonable business hours no longer has beverage services) far past the closing of all dining halls and retail locations, their one option for a late-night beverage aside from tap water filled from the bathroom sink (there is no drinking fountain in this section of the library) is to make a purchase from the vending machine.

Future studies and recommendations

According to the University of Vermont Energy Management Office, in 2003 the University had installed 80 soda machines across campus, together consuming roughly 161,527 kWh of energy per year and emitting 176,000 pounds of carbon dioxide to the atmosphere (Energy Efficiency Projects). To be prudent with energy usage, extracting the specific beverages that are being sold out of each vending machine is an important piece to deciding the future number and placement (if at all) of vending machines on campus. For instance, if significantly more bottles of water are purchased from vending machines located in parts of campus/buildings far from a source of free, clean drinking water, or if the vending machines situated in these places are experiencing sales of bottled water and little else, then this could be an indication it is updated tap water infrastructure that is really needed in these areas, rather than a vending machine, selling people a product that they do not truly need.

Furthermore, vending machine studies can be very telling of demographic differences, especially when they are located in a residence hall, where one can assume that the majority of purchases from a given machine are made by the residents of a particular hall where that machine is located. This could be especially helpful in conducting surveys noting the effect of education on consumer practices, with cases such as the University Heights complex, which contains U-Heights North (UHN) and U-Heights South (UHS).

UHS houses predominantly students part of the GreenHouse RLC (Residential Learning Community), an environmental education program focused on ecological and sustainable living in the college dorms and beyond. UHN houses students in either the University Honor’s College, or unprogrammed housing. As is visible in Table 5 (below), there is a remarkable difference in vending sales between...
the two dorms, which are geographically and physically identical (in terms of external accessibility to dining halls and retail sites, as well as internal access to chilled drinking water). While drawing conclusions on the cause of this disparity is premature without any supplemental studies, this case still brings attention to the high premium that must be placed on education in the overall consideration of beverage system changes at the University level.

Table 5 Vending Machines Sales in “GreenHouse” vs. Unprogrammed Resident Hall

<table>
<thead>
<tr>
<th>Resident Hall</th>
<th>Sales 2007</th>
<th>Sales 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>U-Heights North</td>
<td>420</td>
<td>278</td>
</tr>
<tr>
<td>U-Heights South</td>
<td>248</td>
<td>191</td>
</tr>
</tbody>
</table>

(data extracted from Vending Data, Spiegel, 2011)

Table 5 looks at the number of cases (containing 22-24 bottles each) of all beverages sold in vending machines in 2007 and 2010 in the two adjoining University Heights Residence Halls. South is primarily housing for the GreenHouse Residential Learning Community.

Pricing

Originally for this section my goal was to create a chart showing the difference in revenue intake for UVM and UDS (University Dining Services) based upon beverage sales at the various locations (vending versus retail and residential dining) and in various forms (such as a pre-bottled versus fountain beverage).

As arranged in the Coca-Cola sponsorship agreement, UVM directly receives commission based upon beverage sales from all vending machines located on campus. Alternatively, UDS makes a commission from all beverages sold within retail dining locations on campus.

Table 6 Beverage Price Comparison Index in the Market Place by Delivery System

<table>
<thead>
<tr>
<th>Beverage</th>
<th>Volume (oz)</th>
<th>Delivery system</th>
<th>Retail price</th>
<th>Unit price/oz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fountain drink</td>
<td>22 oz.</td>
<td>Fountain cup</td>
<td>$1.19</td>
<td>$.05/oz</td>
</tr>
<tr>
<td>Nestea</td>
<td>20 oz.</td>
<td>Single-use bottle</td>
<td>$2.29</td>
<td>$.11/oz</td>
</tr>
<tr>
<td>Powerade</td>
<td>20 oz.</td>
<td>Single-use bottle</td>
<td>$1.49</td>
<td>$.07/oz</td>
</tr>
<tr>
<td>Minutemaid</td>
<td>20 oz.</td>
<td>Single-use bottle</td>
<td>$1.29</td>
<td>$.06/oz</td>
</tr>
</tbody>
</table>

Table 6 compares the retail price of three beverages sold in 2011 at the Davis Center Market Place, managed by Sodexo under UDS. For optimum comparison, the fountain drink volume calculated for unit price was the 22 oz. (large) cup; however, there is only one fountain beverage filling price for small, medium, and large cups, and for diners who bring their own cup/drinking vessel.
While the actual revenue earned per sale was inaccessible to me, I did make some qualitative discoveries regarding commission from beverage products. For instance, I learned that although price to consumers is in some cases halved by purchasing the same beverage from the beverage fountain versus a bottle, there are incomparably more sales in bottles, for several reasons:

**Labeling/signage**

Price: there are no prices listed on or near the bottled beverages sold out of the cooler – for on-campus students especially, who purchase their food and beverages off of a diminishing balance using a swipe-card, the lack of money-handling may mean that few ever realize the price discrepancy between their beverage options.

Type of container: due to sanitation rules in other areas of dining locations, disabling patrons from bringing their own plates or bowls on which to be served, the same policy does not apply to beverages. A student could theoretically bring their own beverage container of any given size and fill it up for the same price as a fountain cup refill. This given option is not mentioned anywhere in the vicinity.

**Container portability**

The majority of students it seems are paying for the convenience of a portable beverage bottle when they make their purchasing decision. According to Tom Oliver, it is not impossible to conceive of a reusable fountain beverage cup offered with a sealable lid to accommodate busy students.

**Beverage options**

Of the eight beverage options at the beverage fountain, only the three listed in Table 6, above, were also available in bottled form. This is because the remaining five beverages - Coke, Diet Coke, Coke Zero, Sprite and MelloYello, are all carbonated soft drinks, none of which are sold any longer in bottles from the beverage coolers. According to Sodexo employees, soda sales were plummeting, so executive decisions were made by the Coke representative to swap out these beverages in favor of less sugary, “healthier” Coke beverages.

According to Sodexo Operations Director at UVM Tom Oliver, the gap in revenue intake between fountain beverage and bottled beverage sales. According to Oliver, although fountain beverage purchases cost significantly less for a larger volume of liquid, there is also a dramatically lower cost in service and production - water is streamed directly from tap source into a dispensing fountain, and the only costs go towards fountain upkeep and delivery of flavor packets – an incomparably reduced shipping cost to an equivalent number of beverages in bottled form, (Oliver, 2011).

Another interesting finding relates to Coca-Cola’s sustainability image on campus. It has been widely publicized within UDS that UVM is the first school in the Northeastern U.S. to receive Coke’s new line of compostable soda fountain cups.
Rather than replacing all three sizes of fountain beverage cups with compost vessels, Coke has provided only the largest, 22 oz. cup in it’s “green” version. According to employees at the Market Place, however, the 22 oz. beverage fountain cups are the least chosen over the small and medium sizes. The greatest speculation as to why was simply that people are more health-conscious, and do not want to consume a 22 oz. soda or other beverage in that quantity. This also means, that the compostable cups are not being fairly piloted on the UVM campus.
Beverage miles, carbon footprint

Data for the following table was taken from a beverage miles map compiled by Erica Spiegel for the April 2011 Beverage System Panel Discussion.

Table 7  Beverage Miles from Bottler to Burlington, VT

<table>
<thead>
<tr>
<th>Beverage</th>
<th>Bottling Location</th>
<th>Distance from UVM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rookie’s Root Beer</td>
<td>Burlington, VT</td>
<td>5 miles</td>
</tr>
<tr>
<td>Champlain Orchard Apple Cider</td>
<td>Shoreham, VT</td>
<td>44 miles</td>
</tr>
<tr>
<td>Hood Milk</td>
<td>New England</td>
<td>variable</td>
</tr>
<tr>
<td>Coca-Cola carbonated soft drinks, Dasani &amp; Moxie</td>
<td>Londonderry, NH</td>
<td>171 miles</td>
</tr>
<tr>
<td>Minute Maid, Vitamin Water, Powerade, Nestea</td>
<td>Northampton, MA</td>
<td>191 miles</td>
</tr>
<tr>
<td>Smart Water</td>
<td>Milesburg, PA</td>
<td>465 miles</td>
</tr>
<tr>
<td>Orangina &amp; Yoohoo</td>
<td>Carstad, NJ</td>
<td>705 miles</td>
</tr>
<tr>
<td>Honest Tea</td>
<td>Windstar, VA</td>
<td>775 miles</td>
</tr>
<tr>
<td>Evian</td>
<td>France</td>
<td>3,000+ miles</td>
</tr>
</tbody>
</table>

Table lists the estimated miles traveled by each beverage from its point of bottling to the UVM campus in Burlington, VT (data extracted from Vending Data, Spiegel, 2011)

Figure 9  Beverages sold on campus in 2010 by type and estimated beverage miles

Figure 9 shows the number of bottles that were delivered to UVM by the Coca-Cola company in 2010 for sale in retail and vending locations. Figure 9 multiplies the approximate distance from the site of production for each type of beverage (Table 7) to UVM by the total number of bottles sold (Figure 6), to estimate the total miles travelled by all Coca-Cola products delivered to and sold on campus in that year.
**Discussion of beverage miles**

The previous data could be useful in calculating the carbon emissions through fuel combustion from shipping of various beverages to campus. In order to calculate the carbon footprint* of beverage shipment, a formulaic method would need to be chosen and applied to account for weight of beverages, method of shipping, and fuel type utilized, among other factors. As climate impact rating is a growing trend in higher education, data of the carbon footprint of food and beverage purchasing is a facet of which it is important for a University wishing to be competitive in this field to take hold.

The data shows that the distance a beverage travels to reach its point of sale cannot be the only factor indicating its climate impact. For instance, the nearest bottling site of Coca-Cola carbonated soft drinks, Dasani water, and Moxie energy drink is 171 miles from Burlington, making these the most locally produced Coca-Cola beverages available on campus. For their quantity of scale, however, these beverages appear to contribute the most to carbon emissions related to beverage shipment at UVM. On the other hand, a beverage such as Honest Tea, while only bringing in a quarter of the sales of the aforementioned beverages, must travel seven times further to reach UVM, and therefore contributes a disproportionate amount to carbon emissions from shipment.

The three non-Coca-Cola beverages (Hood Milk, Champlain Orchards Apple Cider, and Rookie’s Root Beer) were not included in the charts due to the inaccessibility of their retail volumes at the time of this compilation. Determining the carbon output associated with the shipment of these locally produced beverages could be interesting and useful data to collect in the future as well.

*Note that miles traveled refer solely to the last stage in beverage production – mixing of beverage and bottling - and do not factor in the origin of all ingredients used to flavor beverages, nor materials to produce their containers. Beverages sold or consumed in fountain form utilize Burlington tap water directly piped into a water fountain or on-site beverage-mixing fountain and would, in this case, be considered to have “0 shipping miles.” This excludes, however, the origin of the ingredients comprising “flavor mixes” delivered to the University to be reconstituted as flavored fountain drinks.
Water refill station data
The following table is a detailed organization of current water fountains on campus as of Spring 2010 by site (building and region of campus) and condition/features. There is also consideration of the ability to retrofit outdated fountains lacking newer features.

Table 8  Sample of campus drinking water infrastructure

<table>
<thead>
<tr>
<th>Campus area</th>
<th>Building</th>
<th># fountains</th>
<th>vending machines?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redstone</td>
<td>Christie Hall</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Trinity</td>
<td>McCann Hall</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trinity</td>
<td>Richardson Hall</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trinity</td>
<td>Hunt Hall</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trinity</td>
<td>Sitchel Hall</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Trinity</td>
<td>Ready Hall</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Redstone</td>
<td>Patterson Hall</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Trinity</td>
<td>Delehanty Deck</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 8 focuses on the areas of campus deemed most unfit to meet drinking water needs in terms of refill station status and accessibility. More data is available, including detailed accounts of placement and condition of existing refill stations across all of campus, and the potential for updates/retrofitting to occur - courtesy of the Office of Sustainability, 2010.

A recommendation for future beverage system planners is to create a comprehensive map (possibly utilizing GIS technology) to pinpoint exactly which areas on campus are well served with beverage infrastructure, and which are in need of attention. This could be as basic as locating which buildings have no water refill stations, to locating where on campus water refill stations and beverage fountains could overlap with vending machines, deeming the presence of a vending machine unnecessary. A drinking water infrastructure study could also go into the condition of each water refill station, noting aspects such as speed of flow and temperature in order to decide whether it is a fountain desirable for use by university members and guests.

History of beverage activism at UVM
The following section summarizes findings about the past decade's movements at UVM seeking to change beverage sourcing on campus.

2003 – Coke Agreement begins: Raising campus consciousness
As far as any documentation can prove, the bold sentiment behind the student-led movement to oust Coca-Cola from UVM’s campus was first issued by a more seasoned voice – that of the late Assistant Professor of Philosophy Will Miller. “The administration and Coca-Cola can terminate this contact. A well-informed, active boycott will encourage them both to do so,” wrote Miller.
According to his October 13, 2003 letter in the Vermont Cynic titled, “UVM Coke a Travesty and a Joke,” it was a Burlington Free Press article earlier in the fall of 2003 that released news to the UVM community of the administration’s decision a year earlier to enter into a ten-year sponsorship agreement with Coca-Cola (Miller, 2003). This is the first publically documented account of a community response to UVM’s relationship with the company.

Miller is remembered on UVM’s campus in circles of social justice and activism as an inspirational campus voice against violence, oppression and injustice worldwide. His cautionary letter to the editor touches upon the lack of transparency on the part of the administration in failing to consult with or even notify community members before entering into a contractual agreement that he warned would “restrict choices for all.” Miller also admonished the move for putting at risk the UVM’s community’s “duties to the public and to [their] material independence from corporate control.”

Above all other qualms, however, Miller voiced his staunch disapproval of Coke for the allegations demarking it as an abuser of human and worker’s rights, especially in Colombia. Miller wrote at a time when the “Killer Coke” campaign was beginning to spread across University campuses at a quickened pace as accounts of the company’s implications in anti-union activities was making headlines around the world. Miller was also well aware of the student and larger international movement, fervently encouraging the campus to check out resources such as the US Student Association and Union Voice, and also to join the boycott as a campus community.

2004-2007 Students Against Killer Coke

Shortly after Will Miller’s call for action, a group of students assembled to convince UVM to publically denounce the company under similar appeals to social justice and human rights for those afflicted near and in Coke’s factories abroad.

According to an article by Ken Picard in Seven Days from 2006 titled “Students Campaign to Kick Coke Off Campus,” UVM students began a campaign during the 2005-2006 school year, in conjunction with the national organizations United States Against Sweatshops and the Campaign to Stop Killer Coke, and modeled after similar campaigns at schools across the nation.

The specific movement at UVM was orchestrated by a group called the CRC - Coalition for a Responsible Coca-Cola. In an interview for the 7Days article undergraduate Natalia Fajardo quoted a part of UVM’s Common Ground stating: “we are a community that unites against all forms of injustice,” as grounds to hold the university accountable to cutting all ties with Coke (Piccard, 2006).

According to their website, the CRC was a coalition stemming from the larger network at the time of student activist groups, Students for Peace and Global Justice (SFPJ). According to Fajardo, they first came together in 2004, and for the next two years focused on education – first amongst themselves, and then spreading the knowledge across the campus community. Their first large event brought in a reported seventy-five people to Waterman Memorial Lounge, where they listened to a phone call with Luis Cardona, a labor activist from Colombia, who witnessed firsthand the death of a fellow organizer by the hands of paramilitary soldiers.
within the gates of a Coca-Cola bottling plant located in Carepa, Colombia. (Piccard, 2006).

After the initial buzz raised by the guest appearance of Luis Cardona, the students of CRC continued to keep busy organizing mostly educational presentations and events such as blind water taste tests between tap and Dasani water, and giving free samples of Wanu soda, a Winooski-based beverage company. They also wrote a petition that was widely distributed across campus and delivered to President Fogel and the Board of Trustees. According to Emily Nicolosi, another former student who was involved in the CRC, President Fogel did recognize the effort of students around this issue, and consented to read their documents and dialogue with them. However, “without any serious pressure from the media and the student body, there was no way he was going to cut the contract,” (Nicolosi, 2011). According to Nicolosi, Fogel would use the alleged “million dollars” in scholarship money going to UVM athletes as further reason to stick with the Coke agreement.

The group had a strongly organized front of educational outreach to student groups campus-wide, as evidenced through their email correspondence between 2006 and 2007. They had a presentation prepared in which they informed their peers about the alleged environmental and human rights atrocities of which Coke was accused, as well as the terms of UVM’s sponsorship agreement. They saw themselves, according to Fajardo, as “fact givers” than “fact finders,” which is why they did not spend their efforts writing and organizing student survey data (Fajardo, 2011).

Alternatives to Coke?

Although during the later years of the campaign an informal boycott was attempted – according to Nicolosi, more through encouraging people to not drink Coke products generally than a “this-day to a that-day type boycott” – the group’s proposal for an actual alternative to Coke products was a bit vague and amorphous. Smaller (some local), independent companies such as Steez, Blue Soda, Jones Soda, and Wanu were all named as potential alternatives for beverage provision, however there was no significant progress made in securing their distribution on campus. The closest contact that the organizers kept with an alternative company was the Winooski-based Wanu which is now, according to Fajardo, out of business.

According to both Fajardo and Nicolosi, while it definitely shares many flaws with Coca-Cola, the CRC would have accepted Pepsi-cola as a campus alternative. They decided to follow the strictly Killer Coke campaign because, according to both Fajardo and Nicolosi, targeting such an infamous company, “would force other [companies] to change too,” (Fajardo, 2011).

The success of the campaign in the eyes of these organizers was uncertain. Nicolosi felt that the energy and involvement in the campaign before her graduation in the spring of 2008 was a marker of success; however, when the four main drivers of the campaign all graduated, the future of the club was cut short she said.

Bring Your Own Bottle (BYOB) 2008-2010

The Bring Your Own Bottle (BYOB) campaign began in the spring of 2009, when members of VSTEP, under the leadership of Emilyn and myself, decided to
work with University Dining Services and the meal plan contracting company Sodexo to plan a day on campus where bottled water would not be sold. The group had already undertaken a “droplets of knowledge” bottled water awareness and education campaign, and was ready to escalate the campaign to the next level.

With the support of the Student Life Department and Kate Strotmeyer, the director of marketing for the Davis Center, VSTEP was able to take its ambitions higher, implementing its first successful BYOB day on Earth Day of 2009. Along with the three locations on campus (The Marché, the Market Place and Cat’s Paws) that consented to withhold bottled water sales for that day, the group had collected over 700 empty disposable water bottles and hung them prominently from the main staircase landing in the Atrium – a conspicuous representation of the number of water bottles used and disposed of each day on UVM’s campus. Not only did VSTEP try and represent the amount of waste being salvaged by the community’s prohibition from purchasing bottled water, but the group attempted to help foster positive behavior from that day onward through the distribution of 1,000 reusable water bottles, donated from the Davis Center marketing budget for this purpose. During the day, people were directed through VSTEP members and numerous signs to come to the VSTEP tables to sign a no bottled water pledge and receive one of our reusable bottles, rather than purchase bottled water, which had been removed from its cases or blocked off from sale.

The following fall of 2009, VSTEP once again hosted, with the support of Student Life and Sodexo, a BYOB day. The group again distributed reusable bottles and convinced retail locations in the Davis Center and the Marché to cease the sale of bottled water for that day. That year, rather than hanging the bottles in one place, we made smaller bottle pyramids, representing the number of bottles consumed per capita in the US, and the number of those that would be recycled. We also constructed “bottle costumes” to be worn by volunteers running into lecture halls and other crowded spaces on campus to incite curiosity and excitement about the initiative.

The BYOB event that year elicited even more attention than it did its first year – a news team from the local Fox station came to film the goings-on and talk to the organizers about the concept and goals of BYOB day. VSTEP was also involved in attracting some negative attention, such as from the manager of Cat’s Pause, a non-Sodexo retail site on campus, who was contrary to the idea of taking away consumers’ free choice to purchase bottled water for even one day. The campaign also alerted attention to the regional Coke headquarters of a sales drop resulting from intentional actions on behalf of the University. While no fines were incurred, University Dining Services heeded the warning and alerted members of VSTEP that prospects were dim of ever again holding a similar event on campus.

In addition to campus-wide events, VSTEP also held smaller events, still open to the entire campus community. These included the screening if two internationally renowned documentaries, ‘Flow: For Love of Water,” and “Tapped.” These films were inspiring and highly informative, and also served as excellent member recruitment zones.

Another result of this campaign was a change to the legislative agenda of student government over the course of student organizing around bottled water.
Two SGA legislations (available in Appendix), the Bottled Water Consumption Deterrence Act (McDonald, 2009) and the Resolution Supporting a Ban on Bottled Water (Baron, 2010) were written and passed by SGA senators as a testament to the level of student mobilization and support for a bottled water-free UVM.

Discussion

While both the movement around Coca-Cola and that around bottled water were rooted in campaigns with strong student (and other community member) support and education/outreach, the largest inhibiting factor to the ultimate success of both of their individual goals seems to be one of timing. Unfortunately, there was no leaking of the administration’s corporate contracting plans before the critical decision was made, and as is the nature of an exclusive agreement, the Coca-Cola exclusive sponsorship prohibited any real changes from occurring on campus for the duration of its term. If the leaders of the movements had indeed expected their efforts to result in the booting of Coke and bottled water, then they would undoubtedly have felt unsuccessful by the results. In raising consciousness and setting a framework for future campaigns (such as the Sustainable Beverage System campaign), neither of these movements were wasted efforts.

On the other hand, even had the Coalition for a Responsible Coca Cola or the Bring Your Own Bottle campaigns successfully accomplished their respective goals of ending the Coke sponsorship and prohibiting the sale and distribution of bottled water, it is questionable how “successful” these ends would have been upon an assessment of the actual values each campaign was attempting to address.

In the case of the VSTEP campaign, the allopathic strategy of aiming our sights on one offending entity – bottled water – was really one droplet in a sea of a whole-systems problem: the reinforcing loop of corporate control of water resources and a constructed demand for convenient beverages in disposable packages. I would argue that while both movements were powered by admirable ideals, their foundations could not have withstood the pressure of actual institutional implementation and social misunderstanding and retaliation without a more updated, holistic approach.

B. Beverage system changes in U.S. institutions of higher education

Having an understanding of the greater movement towards sustainability in beverage systems was an important component to the campaign. This information was useful in legitimizing the initiative at UVM, provoking the administration to rise to and surpass the standards set by other universities, and also in finding inspiration and models to guide student organizers and University officials alike. Due to constraints of time and low response rates, my outreach resulted in firsthand accounts from only four of the universities with sustainable beverage system changes (Wash U, Seattle U, Brown, and Depauw). Expanded accounts of these cases are written later in this section. I did compile data of all of the U.S. colleges and universities with notable policies promoting sustainability through beverage system changes, and these results are in the table below:
Table 9  *U.S. Colleges/Universities with Bottled Water Bans as of May 2011*

<table>
<thead>
<tr>
<th>School</th>
<th>Size*, Type, Endowment,</th>
<th>Bottled Water ban** since</th>
<th>Other bottled beverage sold?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington University (St. Louis, MO)</td>
<td>5,997 students Private $4.6 billion</td>
<td>January 2009</td>
<td>Yes</td>
</tr>
<tr>
<td>Belmont (Nashville, TN)</td>
<td>4,643 students Private $64.6 million</td>
<td>May 2009</td>
<td>Yes</td>
</tr>
<tr>
<td>University of Portland (Portland, OR)</td>
<td>2,997 students Private, Catholic $71 million</td>
<td>February 2010</td>
<td>Yes</td>
</tr>
<tr>
<td>Brown University (Providence, RI)</td>
<td>6,316 students Private $2.18 billion</td>
<td>September 2010-sales ban; full ban by 2012</td>
<td>Yes</td>
</tr>
<tr>
<td>Seattle University (Seattle, WA)</td>
<td>7,751 students Private, Jesuit $164 million</td>
<td>September 2010</td>
<td>Yes</td>
</tr>
<tr>
<td>Oberlin College (Oberlin, OH)</td>
<td>2,970 students Private $633 million</td>
<td>? Fall 2010 (Individual bottles banned only)</td>
<td>Yes</td>
</tr>
<tr>
<td>Depauw University (Greencastle, IN)</td>
<td>2,400 students Private $442 million</td>
<td>May 2010</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 9 Known institutions of higher education with confirmed, official school-wide bans on bottled water sales and distribution as of 2011. This data was determined through personal contact (in-person and email) and official school publications including sanctioned student media sources and public statements.

*refers to number of undergraduate students as of 2010
**refers to the ending of sale and distribution on campus of plain, unflavored water in disposable bottles

**Discussion of national movement and integrated case studies**

Although I was only in direct contact with organizers from four of the U.S. universities with successful bottled water bans, I was able to draw some major
similarities between all of the schools in ways that distinguished them from UVM. These observations were supported through the dialogues I had during the project.

**Institutional size**

The first shared trait of these schools was their size. All of the schools were small – the largest, Seattle University with an undergraduate class of 7,751 in 2010, and the smallest, Depauw University, hosting just 2,400 undergraduate students in that same year. It is not surprising that a small university, with a closer community where students can access their administrators and stand out with less effort, would be the more common venue for progressive changes, especially those arising out of student demand. According to junior Paige Kerstein from Brown University, the University has a council comprised of students, staff, faculty, and administrators who listen to concerns and proposals presented from members of the university community, and turn them into university policy resolutions. Through a student proposal to this council, the decision for a campus-wide bottled water ban was generated, and soon thereafter implemented (Kerstein, 2011).

Even for student initiatives that don’t receive immediate support from university administrators, on a small campus there is generally much greater opportunity for student collaboration, and at the very least awareness of salient issues on campus. For instance, it took determination but it was possible for over ten members of VSTEP to collect 1500 student signatures in support of the Sustainable Beverage System resolution. Impressive as this may be, out of an undergraduate class of ~13,000, this figure presents no overly compelling mandate for an immediate policy change. For most of the campuses that have banned bottled water, however, 1,500 students is a highly significant portion of their undergraduate population – from half to almost three-quarters of the entire student body in many cases.

At Seattle University, for instance, the administration initially felt that it needed more evidence of significant student support for a bottled water ban before they would move ahead in implementation. According to Gretchenrae Callanta, one of the main student coordinators of the bottled water ban initiative, a petition was distributed across campus following an intensive education campaign. As a partial result of the fact campaign which reached a large portion of students on campus, the organizers collected a majority of their peers’ signatures in support of removing bottled water, helping to convince the administration to sign on to the initiative (Callanta, 2011).

Typically, at small schools there is less area to cover, making advertisement of even a campaign run by few members an easier feat than one attempting to raise awareness on a huge, sprawling campus. Geographically, smaller schools have not only less physical space but fewer distinct locations (such as eateries and other central meeting places), also resulting in smaller display and advertising efforts going much further.

The last size-based consideration for these campus success stories is the more connected nature of student organizations in facilitating the escalation of a movement at a small school. With fewer factions, or more links between the factions, it is possible for a small group of students to cover much social ground.
Such was the case at Depauw University, where sophomore Tyler Hess organized the weekly delivery of presentations to different student groups (although the majority were Greek organizations). In one semester, a great proportion of the total student body had been directly exposed to Hess’ bottled water campaign, and in a personal, engaging way (Hess, 2011).

**Funding source**

Along with their fractional size to UVM, all of these institutions happened to be privately owned. According to Ralph Stuart during an interview in March 2011, the source of funding plays a significant role in an institution's ability to react to changes both internally (for example cultural shifts and student demands) as well as externally (such as market volatility). In private institutions, decisions are greatly influenced by their largest financial contributors - wealthy benefactors with a given agenda can make great strides in policy changes at a private university. Students at private schools wield significantly more power than their associates at public schools who on average do not contribute as substantially to their university’s budget.

Alternatively, state-funded institutions find themselves under much more complicated funding deals. They are largely at the whim of state mandates, and are therefore subject to the at times glacial pace of the legislative process. They are also put at greater risk than most private schools during times of recession, when states may be forced to reallocate funding, or lose significant funding from the federal government. When it comes to working with service providers (from building contractors to food and beverage vendors and distributors), public institutions are often forced to settle for the lowest bidder, regardless of their corporate responsibility records. Private institutions, with far fewer budgetary constraints, have the ability to pursue a “triple bottom line” through more innovative companies or negotiations (Stuart, 2011).

**Ideological base**

Another interesting finding that a few of these universities shared was a non-secular foundation. While only two of the confirmed universities with bottled water bans at the time of my research were officially religious institutions, I learned of other such schools, such as the College of St. Benedict – a Catholic institution that referred in many university publications to its faith-based mission to reject injustice to all and which according to some sources will introduce a bottled water ban beginning August 2011.

Faith-based or otherwise, the one factor that seems to connect all of these schools is their commitment to environmental sustainability. In this movement, UVM is not only a peer but a leader, and located in a state with an impressively progressive government and populace. It would truly be shocking to not see Vermont’s University listed in the near future as at the very least a member of the bottled water ban movement, if not spearheading the move to reach for sustainability at the beverage system level.
Critique

Similarly to the preceding campaigns at UVM that focused quite narrowly on a single company or product, the institutions engaged in bottled water bans have a comparable seeming disregard for the larger implications at stake in distinguishing bottled water from all other bottled beverage products, equally as egregious in their social and ecological threats. I was frequently irritated by the lack of critical thinking that was applied in the rhetoric of the campaigns or their spokespeople. The same five or so facts about the amount of oil and water used to produce bottled water, the number of plastic bottles disposed of each year in the US, and the lack of accountability on the behalf of the FDA to safely regulate bottled water were used unfailingly in the literature, interviews, and websites of each institution in question, and they seemed to lack the shock or personal saliency necessary to really get the public rallying behind an issue.

Alternatively, many of these movements seem to have become co-opted at the administrative level—taken on as just another order of business, or even worse—a publicity statement to be touted around and put up on the homepage for a sustainability department—without widely affecting the lives of those who continue to be pacified by all of the bottled Vitamin Water and Coke Zero that they can metabolize (or not).

The lack of deep integrity in many of these modifications to beverage supply is again apparent in the framing of the initiative at many schools. The facts disregard not only the resources involved in the production and shipment of other bottled beverages, but the entire culture around choices of convenience, and choices at all. While it is largely uncontested that bottled water is an irresponsible and superfluous beverage in light of the easy access to and stringent regulation of tap water in many municipalities across the nation, there is an appalling lack of mention by campus campaign organizers that our culture’s consumption of hundreds of other delivered beverages may need to be put in check as well.
Student organizing strategies

**Sustainable Beverage System campaign foundation**

The following section will cover the process leading up to the establishment of a campus movement encompassed under the campaign for a Sustainable Beverage System.

**Building a coalition**

Defining a unified goal across the campus community was imperative in building a cohesive and viable movement. At the first coalition meetings in the fall of 2010, I brought together members of VSTEP with others from the Office of Sustainability, Student Government Association, and Eco-Reps in an attempt to find a common mission behind which to stand. Initially, the representatives of these groups that I identified as potential allies, each came to the goal-setting table with a slightly different agenda. For instance, the Office of Sustainability was interested in the issue of bottled water distribution on campus, and the Eco-Reps were continuing their reusable bottle advocacy work. We learned that certain members of student government had begun research into the allegations against Coca-Cola, as well as the potential for local companies to fulfill the current beverage demands on campus in Coke’s wake.

In October of 2010 SGA issued the Vermont Student Opinion Poll (VSOP) in featuring questions that explicitly asked members of the student body for their opinions of Coca-Cola as a company and its presence at the University. The results showed that of the 602 random UVM student respondents, the majority were indifferent to or did not like having Coca-Cola products on campus, and would feel indifferent to not having them any longer. After compiling these findings, SGA seemed prepared to launch an anti-Coke initiative on campus as their attempt to hold the University accountable to reconciling its words and actions.

As reported by a VSTEP member in contact with the Slow Foods group, that group’s particular entrance into the issue was almost exclusively focused on UVM providing beverages made from ingredients which fall under their classification of “local” and “organic.”

**VSTEP's whole-system approach**

Diverging somewhat from the goals of the other interested groups, VSTEP decided to build its campaign on a more comprehensive analysis. Our group’s Bring Your Own Bottle campaign during the previous few years targeted bottled water as a socially and environmentally unsustainable product. However, by stepping back and taking in a more complete picture we could see how bottled water was just one symptom of a larger issue.

A policy banning bottled water and not other bottled beverages would have, from VSTEP’s perspective, lost part of its reputability if other beverages were still sold on campus that shared the majority of the negative social and environmental impacts of bottled water. After all, the production of any bottled beverage (soda, juice, iced tea, etc.) comprised of water + flavoring had the potential to: endanger ecosystems through the irresponsible extraction of water; consume massive resources of oil through the production and shipment of plastic bottles (the majority...
of which become pollution); and threaten human health through toxic chemical leaching into beverages. Additionally, many of the bottled beverages sold on the UVM campus contained artificial ingredients and high sugar contents, raising health risks to their consumers. This was an issue of consistency, where the logic applied to one decision failed to be used in addressing closely related issues that are just as pressing. Further, it had the capacity to distract the public from seeing the deeper roots of problems.

The same issue of consistency held true with the question of maintaining Coca-Cola as a business partner. Depending on one’s approach, fighting for a ban of all Coke products because of environmental concerns might serve only to open the door to a contract with another large, multi-national corporation, equally implicated in poor environmental practices. Even with a strong commitment to small-scale companies, we would still be complicit in providing non locally-sourced beverages in disposable containers, and serving the interests of companies that profit off of the bottling of water while producing unnecessary amounts of waste.

Regardless of these mounting beliefs, VSTEP still felt strongly about disengaging UVM from the negative impacts associated with bottled water and Coca-Cola products. In fact, each individual from the club would have been satisfied to see just one of the listed grievances addressed by the University. However, the group saw a pivotal opportunity in the approaching deadline to such a long period of stagnation under the Coca-Cola sponsorship agreement, and it was important to us to aim high in asking the administration for change. We decided that when issues are considered too complex or deeply imbedded in a certain system to change them, then that is when they most need to be confronted, and confronted through whole-systems changes.

Creating a vision for a sustainable beverage system

From the newly founded belief in systems-oriented changes, members of VSTEP began a dialogue to develop a vision for a sustainable beverage system at UVM. In this visioning, the group focused mainly on positive aspects – what everyone wanted to see on campus, rather than what they did not want. This held VSTEP to be both explicit in defining its calls, yet reasonably flexible in most conditions. For instance, rather than demanding a ban on bottled water, the group envisioned “a [campus which] provides free and adequate access for all on campus to safe, local drinking water.” While this statement did not hold the University to any exact program or methods, this was clearly stating a mission that, if followed, would lead to the end of bottled water through requests for water that is “free,” “safe” and “local.” Through this type of language we were also expressing the values of environmental and social justice, two main tenets of UVM’s highly publicized mission as a university.

To take the theme of accountability even further, VSTEP’s vision statement incorporated UVM’s institutional mission, or “Common Ground,” calibrating each of the values of: responsibility, innovation, respect, justice, openness, and fairness with a specific visionary clause. While the administration might choose to write off some student campaigns as representing a vocal minority, or non-representational faction of the student body, with a movement integrally aligned with the University’s own
stated vision, the group hoped that these pleas would hold legitimacy to administrators and hit close to home across the university community.

The name for this campaign, Students for a Sustainable Beverage System, was first suggested by VSTEP's Vice President, Jess. As soon as the acronym “B.S.” was pointed out by another member, it was quickly incorporated into dual-meaning statements like “What is this B.S.?!”. Soon we launched our name recognition through fliers posted around campus bearing our formal campaign name and the catch phrase “Let's Change This B.S.!”

**Social networking**
Since the term “beverage system” was essentially coined for the purpose of our campaign work, we realized early on that we were going to need a venue to define this concept, as well as explain what exactly we were attempting to do on campus. I began by updating our club’s existing Lynx page to feature more information about the Sustainable Beverage System (SBS) campaign. As VSTEP's Lynx page is not well trafficked, (the Lynx in general is not a system that is extremely user-friendly, most likely contributing to its low popularity amongst students), we developed a new web space for our campaign, using the free online blogging site Tumblr.com.

**Tumblr.com blog site**
The positive aspects to using this site were the ability to choose an easily recognizable web address, the pre-designed templates available for use, and the relative ease with which we could make simple updates to the page.

There were numerous downsides to using this online medium, such as the single, scrolling page format making organization next to impossible. Where one of our main intentions in creating a website, aside from providing a space for information about our campaign's foundation and progress, was to create a venue for the collection of opinions, questions and ideas about the initiative, we unfortunately were unable to have such feedback collection through this site.

**Facebook**
On Facebook, members of VSTEP and I experimented with several types of user contact. We first created a Facebook page for “Students for a Sustainable Beverage System.” Many groups, organizations, and celebrities create Facebook Pages as a site for the general public to read their bios and information, find links to more sites and information, and share their interest in this group or individual publicly through becoming a “fan.” A downside to using a Facebook Page is that the creator of a page cannot directly contact its fans through a message – they may only update the page, and hope that the fans are continually checking these updates (and, given the exceedingly over-stimulating nature of Facebook, there was not much hope in this prospect).

In an attempt to have more direct contact with our peers, I created a Facebook event for Students for a Sustainable Beverage System titled, “Let’s Change this B.S.!” While generally Facebook events are programmed to last for a given amount of time - such as, Sunday, May 1 from 12:00pm to 6:00pm – after which
point they are erased from the website, I decided to create an event that would technically last until the end of the spring semester. I created an “open” event so that anyone invited could invite as many of their Facebook friends as they wished. Through this method, over 200 individuals were invited to the online event, and nearly 100 responded that they “would attend.”

The largest perk of utilizing an event page was the ability to send out messages, which would reach the personal Facebook inbox of every individual invited to the event, regardless of whether they had accepted, declined, or ignored the invitation. I sent out mass messages encouraging people to message me with questions, ideas, requests for campaign materials (such as VSTEP’s resolution + petition sheets), and to inform everyone of upcoming events.

A downside of the event page was that there was limited space to put information directly on the page. I did use the scrolling message board at the bottom of the page to post links to several related articles, and a few guests wrote very short comments on the wall or “liked” the posts.

Overall, virtual networks did not seem to be the most effective way in which to attract and recruit members. The buzz created by VSTEP’s premier of a new networking outlet never seemed to sustain the time period necessary for real engagement in the movement by the viewers of any given media source, and ultimately, it was through interpersonal interactions that we really recruited new members and even informed supporters.

**Discussion of online organizing/social media tools**

Using Facebook as a social media tool had several overall benefits. One is that individuals are usually easier to find, as their account name is generally the same as their name, as opposed to a less predictable email address. As the majority of UVM students already have an account that they check regularly, it was an easy and relatively reliable way to keep people updated without recruiting them in person and getting their email addresses.

On the downside, Facebook is used for an ever-expanding number of purposes that it can be difficult to create an event or message that stands out to users. Another downfall of Facebook (or any virtual social network) is the potential crutch that may develop from utilizing a remote source of interaction. A recent, growing trend seen amongst non-governmental and activist groups is the use of online and social media tools to do everything from recruiting members, to keeping them informed, and even offering them participatory, albeit virtual, actions to take, such as signing online petitions and “liking” pages in order to attract the attention of a company or politician. This new wave of “clictivism” as it has been called by social researchers may have the deleterious effect of creating an illusion of “being involved” without an individual actually needing to act at all.

While the Sustainable Beverage System campaign remained small-scale enough during the 2010-2011 school year that an excess of online participants was never of great concern, I do carry the strong belief that the usage of online networking (though cursory as it was) yielded fewer positive results on the overall organizing of the campaign than it was worth in time and effort. For instance, the energy that others and I put into navigating the various online sites for a minimal
measurable gain (in terms of feedback received and physical members joining the movement) could have put into designing effective posters and display materials, or in developing interpersonal connections through tabling, conducting focus groups, and giving in-person presentations.

While it is true that the results of any information campaign are a challenge to measure (it is difficult to tell how many people have viewed a certain page of information, be it on the wall of a blog or of a building), as a means of direct contact with actual and potential participants, I fully believe that face-to-face contact will never be overshadowed as the most effective tactic. The number of newly recruited members during the campaign through online sources was entirely negligible, especially when compared to those recruited through person-to-person dialogues. I believe the answer is therefore a two-fold approach, where recruitment, name-recognition, and crucial, foundational information must be transmitted through personal connections, and virtual tools may be used, sparingly, simply as reminders in a busy world of specific information and events.

**B.4.3 Campaign documents and feedback**

The two official documents that came out of the campaign - the Student Vision for and the Resolution in Support of a Sustainable Beverage System – were key components of the campaign. They are summarized below and can be found in full in the appendix.

Figure 10  **Student Vision for a Sustainable Beverage System Summary**

A Sustainable Beverage System would include a **campus environment** which:
- provides free and adequate access for all on campus to safe, local drinking water
- reduces waste by providing reusable beverage containers in place of disposable ones wherever possible
- educates community members how to be responsible global citizens through lifestyle changes

A Sustainable Beverage System would only include **contracts with companies** that:
- are not implicated with abuses to the human rights or general wellbeing of their employees or citizens in any areas of production
- pay all employees a universally fair wage
- make direct and positive contributions to public health (as defined by the UVM community)
- are not implicated with the degradation of habitats and ecosystems
- grant local, sustainable companies a more equitable share of marketing and shelf space
- offer products which have minimal environmental impact throughout their entire lifespan
- agree to a shorter contract that is responsive to requests for change from the campus community during its term.

In order to respect these requests, the **administration** must first agree to:
- seek out and incorporate student values into the agreements under the next beverage contract.
- make its beverage contract and related documents/figures publicly available
Resolution summary

See Figure 3, page

The following figure attempts to outline the main themes VSTEP encountered through outreach within the UVM community:

Figure 11  Community feedback on Sustainable Beverage System

agreed with...
  • all aspects of campaign
  • holding UVM accountable to its stated values
  • VSTEP’s environmental values
  • VSTEP’s social values (protecting human & worker rights)

in support of...
  • all stipulations in the resolution
  • bottled water elimination only
  • discontinuation of the exclusive contract with Coca-Cola
  • a complete ban of Coca-Cola products
  • a complete ban of soda products
  • an increase in the amount of local beverage products
  • PET plastic bottle elimination
  • total disposable bottle elimination
  • discontinuation of the funding of any student programs from revenue derived from a corporate beverage sponsorship agreement

concerned about...
  • an increase in cost (of meal plan, beverages, student fees)
  • loss of revenue to the University
  • the loss of student scholarships
  • the loss of beverage choices
  • the loss of Coca-Cola products
  • drinking water from the tap/beverage fountain, because of:
    - safety of water
    - taste of water
    - distribution of fountains
    - acquiring/adapting to using a reusable drink container
  • the loss of convenience of bottled beverages
  • the loss of freedom of choice
  • accommodation of guests to campus
  • accommodation of individuals with health conditions who cannot consume tap water
Discussion of documents and feedback

While lacking a quantifying aspect, these empirical findings provide valuable insight into issues to be addressed in the future in terms of fact-finding, survey designing, and general points to take into consideration while drafting beverage system policies.

The vision statement was a useful tool to introduce people to the campaign’s driving concept, and clearly list all of the group’s values.

Notable feedback from particular groups and individuals

**Daniel Fogel** (UVM President) stated that he believed UVM should no longer sell bottled water. Admitted that bottled water is a wasteful and unnecessary product, as the quality of tap water is high in Burlington. (March, 2011)

**Pat Brown** (Director of Student Life) generally supported the discontinuation of bottled water distribution on campus as recommended in the resolution. Questioned the resolution’s intentions regarding the call for a marked decrease in non-local beverages. Pointed out ambiguities in definition of local; for instance, the distinction between “locally sourced,” “locally produced” and “locally owned.”

**Kesha Ram** (UVM alum, former Student Body President, Vermont State Representative, UVM Board of Trustees legislative member) supported a movement away from Coca-Cola products and sponsorship for the human rights abuses of which Coca-Cola has been accused. Advised us to build a campus-wide coalition of as many diverse student groups as possible, and use wide-scale endorsement as justification for University action. Also highly encouraged VSTEP to work with Sodexo representatives and to do our homework and look into all possible alternative companies and beverage sources.

**Staff Council members** were interested in the campaign and generally in support as a body. Wanted to know more about national movement within higher education to remove both bottled water and Coca-Cola products. Expressed interest in working with students on a campaign to reduce the presence of bottled water on campus. Some expressed desire to remove soda from campus for public health reasons.

**Student Government Association senators** were somewhat divided on issue. Some disapproved based on concerns about: University budget constraints, public health related to cross-contamination from reusable bottles, a shortage of water refill stations, a lack of alternative beverage companies to Coca-Cola, the safety of Burlington municipal water, and the false representation of a vocal minority as the voice of the entire student
body. Others approved for: the precedence established by past SGA legislations admonishing UVM’s provision of bottled water, the necessity to hold the University accountable to its mission, the visible efforts taken by members of the student body and the quantifiable support of a significant portion of students in petition form, the results of the October 2010 Vermont Student Opinion Poll, the trend amongst US institutions of higher education to ban bottled water,

**Richard Cate** (Vice President of Finance) agreed that bottled beverages were unnecessary and wasteful products, and claimed personally not to use them. Announced the necessity of collecting quantifiable data in the form of a non-biased survey with statistically significant response showing wide student support in order to move forward with initiative at the administrative level. Claimed that the revenue gained by UVM from the current Coca-Cola contract was not very significant, and would be replaced by other means.

**Staff Council members** were interested in the campaign and generally in support as a body. Wanted to know more about national movement within higher education to remove both bottled water and Coca-Cola products. Expressed interest in working with students on a campaign to reduce the presence of bottled water on campus. Some expressed desire to remove soda from campus for public health reasons. (April 2011)

**Larry Forcier** (Former Dean of Rubenstein School of Environment and Natural Resources, Environmental Policy expert) believed that bottled water should be removed from the University, along with other plastic bottled beverages. He saw the production of PET plastic as an unnecessary waste of resources... (February and March, 2011)

**Sodexo** (Dining company) had no strong belief either way – stated their goal of serving their customer (UVM) by complying with whatever policies they establish and otherwise continuing to provide to students whatever they are choosing to purchase. (For instance, unless there was a change in University policy banning the sale of bottled water, the University’s representative from Coca-Cola would continue to deliver and stock that item in dining locations.)

**Discussion of community feedback**

The reaction of many outsiders learning about the initiative through reading the vision statement, displayed some confusion as to what exactly the members of VSTEP and other supporters of the movement really wanted at the end of the campaign. For instance, many individuals seemed to need more tangible actions that they could take or recommendations for the University that seemed highly realistic before they would personally support the movement.
Imperfect information

One issue with suggesting these more concrete possible courses of action was that, in reality, no one on campus knew exactly what were realistic predictions for the direction of the beverage system. There were some clear market trends and sensible changes in respect to climate change and global energy prices, however at times there seemed to a stand-off occurring between students and the administration. University officials claimed on several occasions to be waiting for clear signs of student mobilization and support before taking any action towards a sustainable beverage system; meanwhile, many students hung back, hesitant of expending a large amount of energy on a campaign lacking clear evidence of administrative support.

The two main types of uncertainties slowing down the escalation of this movement were of economic and social foundation.

Financial concern

Richard Cate stated multiple times during the year that the revenue derived from the Coke contract was neither an imperative portion of the budget nor an ethical means from which to fund a public institution of learning. At the same time, no University financial expert ever publically announced where this portion of the budget would come from if not a beverage agreement. Neither did anyone assert that a future beverage agreement would necessarily include a revenue-sharing program at all. In short, finances are an undeniably important consideration at all times, and no less during an economic recession with budget deficits and educational cuts already alarming to many.

Student satisfaction

Socially, the University does have a vested interest in keeping its students and other community members and visitors happy. If drastic measures are taken in a hard-impacting area without ample notice or time for individuals to adjust, there is the potential to alienate or outrage the public, eliciting a poor reputation and even a drop in enrollment. This presents a reason for the administration to approach an issue like beverage distribution through a precautionary lens.

This also signified that it is largely up to students to mobilize around issues about which they feel very strongly, displaying either their support or disapproval. It is when students are well organized, strategic, and ostentatious in their demands that they are truly recognized, and in a more timely manner (as demonstrated through several historic Waterman occupations). Administrators such as Richard Cate made it quite clear that they would like to support the work of the students involved in the beverage system campaign, but they needed to be held to their word.

Discuss reactions to positive rather than negative language in documents (giving people alternatives, rather than just taking things away.)
B.4.4.1 Collaborating with classes

Of the 12 UVM faculty members whom I contacted over the winter break after the fall 2010 semester, six responded to me (see Table 10, below) by the beginning of the spring 2011 semester. Additionally, I was in contact with one undergraduate student. Although I did not get to work thoroughly with these instructors or their courses, they may prove to be promising prospects for future related collaborations, especially those listed as “SL” or Service Learning classes.

Table 10 Potential Course Collaboration, 2011-2012 Academic Year

<table>
<thead>
<tr>
<th>Contact</th>
<th>Course</th>
<th>Potential collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matt Kolan (faculty)</td>
<td>NR 206: Environmental Problem Solving and Impact Assessment</td>
<td>Invitation to pitch project concept to class along with other community partners</td>
</tr>
<tr>
<td>Ralph Stuart (faculty)</td>
<td>-University Sustainability (SL course), -Toxics Policy and the Public</td>
<td>Shared project results on UVM water quality from fall 2010 “Toxics Policy and the Public” students</td>
</tr>
<tr>
<td>Brian Tokar (faculty)</td>
<td>-Food, Land, and Seeds -Climate Advocacy and Justice</td>
<td>Invitation to pitch project concept to class</td>
</tr>
<tr>
<td>Sylvia Geiger (faculty)</td>
<td>NFS 250: Foodservice Systems</td>
<td>Invitation to present project finding to class as part of “Procurement &amp; Issues in Purchasing Unit”</td>
</tr>
<tr>
<td>Josh Farley (faculty)</td>
<td>CDAE 237: SL: Economics of Sustainability</td>
<td>Invitation to work with TA to try and adapt project to course “Quality of Life Impacts of Achieving 350 [ppm]” semester project</td>
</tr>
<tr>
<td>Jessica Hyman (faculty)</td>
<td>CDAE 295: SL: Public Communications Capstone</td>
<td>Interest in project, but Service-Learning partners already secured</td>
</tr>
<tr>
<td>Anna Cady (undergraduate student)</td>
<td>-Statistics 151- Applied Probability</td>
<td>Interest in incorporating campaign into class surveying project</td>
</tr>
</tbody>
</table>

Discussion

My lack of remarkable success in collaborating with courses I believe had much to do with a lack of preparation on my part. The level of interest that I received from half of the professors I emailed demonstrated a notable level of development of the beverage system campaign, and a recognition from some
esteemed faculty members that the issue at hand was both salient and worthy of their attention. What I failed to factor into my plans, however, was that professors are generally required to have their course syllabi completed substantially before the course begins.

As for those courses with project components in the hands of the students to devise, I also feel that I was missing a critical level of preparation. While a substantial number of students expressed interest in the campaign in theory, as material for a class project or Service-Learning experience, their potential role came across as slightly nebulous. I believe that had I brainstormed ahead of time some specific tasks or project goals that students could conceivably undertake in one semester, (such as survey implementation and processing), I may have elicited more interest and engagement from student in these courses.

Public forums
Both the Office of Sustainability’s Environmental Forum and the VSTEP-sponsored Beverage Contract Panel Discussion were successful in presenting information about UVM’s beverage system from the perspective of University officials as well as student organizers of the campaign. Both forums received a decent turnout of undergraduate students, yet a small number of graduate students, staff and faculty. A goal unmet by either event was the wide reception of community feedback on the campaign or a truly productive dialogue.

Material presented at both forums represented a mix of informative data and commentary, as well as the student vision and campaign for a sustainable campus beverage system. At the earlier of the two events, the Environmental Forum, the presenters included Erica Spiegel (Recycling and Solid Waste manager and club advisor to VSTEP), two members of VSTEP, and myself. These presentations featured a viewpoint unarguably limited to the VSTEP campaign, although all speakers strongly attempted to present information in as non-biased a manner as possible. This was most successfully achieved through Erica’s portion, which outlined some of the major sponsorship agreement measures, and what they meant in terms of certain aspects of UVM’s beverage system, such as beverage volumes sold, number of vending machines, and plastic bottle waste.

Panel specifics
The panel discussion allowed for a more diverse range of perspectives and knowledge. The foundational UVM beverage system data was still presented, this time by Gioia Thompson, in the form of a very comprehensive Powerpoint presentation. Each speaker to follow had a unique position in the community, from Richard Cate, a top administrator at the university, to Gretchenrae Callanta, a staff member at UVM who organized a successful bottled water ban at Seattle University, her alma mater, and Tom Dion, a municipal tap water expert from the Burlington Water Quality Department. Bringing together these individuals (along with Community Development Applied Economics faculty member Gary Flomenhoft, and an unexpected appearance by Sodexo manager Melissa Zelazny) built a dynamic case for the sustainable beverage system initiative. The importance of hearing support from the administration, strengthened by both academic and scientific
research establishing the dangers of corporate control of water resources, and coupled with a testimony of a successfully waged university sustainable beverage campaign resulted in a monumental piece of organizing for this campaign.

**Attendance factors**

Student attendance at both events was lower than expected yet satisfactory, the result I believe of VSTEP’s outreach through Facebook and University email listservs. Word-of-mouth was a particularly effective method of gathering an audience, especially in the case of the Environmental Forum, for which an exceptionally unabashed and boisterous member of VSTEP advertised and recruited a substantial number of the audience members present. It seems that the demographics represented at the forums were more-or-less proportionate to the level of effort that went into inviting those certain demographics. Since the Sustainable Beverage System campaign was mostly a student-led initiative, it therefore makes sense that more outreach leading up to each event was made amongst students, with whom the organizers had the most contact. The ___ usage of Facebook as a social media tool to raise awareness of upcoming events also targeted students and by-passed staff and faculty, as the majority of the organizers’ associates on Facebook were students.

The time and location of the events may have been another factor influencing attendance. The Environmental Forum was held in the Davis Center, a central hub of campus, in the middle of the day. This convenience of time and place may have contributed to many students’ ability to attend, since many of them already spend their free blocks of time during the afternoon in that vicinity of campus. The panel discussion occurred later in the afternoon in Billings—a more remote location on campus. Unlike the inhospitable weather during the February forum, the panel discussion fell on one of the first warm days of spring in Vermont—a factor that undoubtedly compelled some of those who would have otherwise attended, to pass.

**Future recommendations in forum planning**

A regret of mine from these organizing experiences was the unfortunately small yield of feedback that they supplied. In planning public events, especially those aimed towards build a coalition or support for a campaign, I now understand the importance of panning to formally collect audience information. A sign-in sheet or written survey can be used to collect the names, contact information, affiliation, and comments of audience members. Receiving this information could have been immensely helpful in recruiting participants and collecting feedback and new ideas to enhance our efforts. Asking how attendees learned of the event is useful information for future planning as well.

As time for public comment and discussion was a limiting factor in both cases, this is another imperative consideration for the future. Scheduling events to be slightly longer (but advisedly no longer than two hours to avoid audience boredom or scheduling conflicts) is important, but less so than maximizing the given time frame to accommodate both speakers and listeners. This planning is complicated by the fact that an event organizer can never be certain of the number of guests who will show up to the event, and so it can be risky to have guest
speakers prepare shortened presentations that may not fill the allotted time period should a smaller audience attend. To avoid this situation, it is wise for event organizers to have prepared questions and dialogue questions to facilitate the forum.

**Collecting and processing feedback**

As far as processing that feedback we did receive, I was responsible for noting each verbal and written response from both events. At the Environmental Forum, no written responses were collected, although I did contact a few students to see what they had taken with them from the presentation. Only one student responded to my request for feedback, however she gave a very positive review indicating the gain of a great amount of new information as well as a shift of values and behaviors (including a personal boycott of all Coca-Cola products).

An unexpected yet helpful source of feedback came in the form of extra credit assignment posts for the International Environmental Studies course for which I was a Teaching Assistant during the spring 2011 semester. The 200+ students were encouraged to attend panel discussion, with the incentive of receiving extra credit for their write-up of the experience. The six resulting extra credit posts were helpful in gauging the reception of the panel from the perspective of students uninvolved in the campaign and arriving at the panel with little-to-no knowledge about the details of UVM’s beverage system.

Each response mentioned the expiring Coke contract, and some understanding of the process of procuring a new one, although to highly varying manners and degrees of understanding. Likewise, each student discussed the bottled water ban initiative. Hearing from a past student initiator of a bottled water ban seemed to be inspirational to the students, and even more so, learning that UVM was in the position to become the first public university to end the sale of bottled water on campus. Another point highlighted by each student was the stance of VP Richard Cate, as being neutral-to-accepting towards banning bottled water sales at UVM, and his insistence that this was an issue of student concern and in need of non-biased survey data to move it forward. Finally, nearly all of the responses made some reference to either Tom Dion’s testimony to the safety of Burlington’s public water, or Gary Flomenhoft’s diatribe against bottling companies for tapping into public water supplies, paying next to nothing, and selling it back to consumers at an average price of $8.00/gallon on UVM’s campus.

What can be learned from these student responses is that the “beverage system” concept was still highly ambiguous to many people after attending the panel discussion. The bottled water sales ban seemed to be the only tenet of the campaign of which people were highly aware. On the other hand, I learned that every student who wrote a response to the panel agreed that UVM should take the initiative to ban bottled water sales, and seemed to feel empowered through their role as a student to influence this action.

**Discussion of Environmental Forum**

Overall these two forums reminded the organizers and myself that we needed to engage more community members, identify mechanisms for collecting
and assessing feedback, simplify our message, devise a more concrete action plan before we recruited more people to work on the campaign.

**Resolution in Support of a Sustainable Beverage System**

VSTEP wrote the Resolution in Support of a Sustainable Beverage System with the intention of having it pass through the Student Government Association and become an official piece of SGA legislation. SGA is held in its charge to present only issues that are important and pertinent to the student body in the form of resolutions to the University administration. As such, we could be assured our resolution would be delivered directly to and read by members of the Board of Trustees, and that our grievances and recommendations would carry more weight than a document arriving from an ordinary group of students.

Initially, the document was shared with several senators who supported in some capacity the Sustainable Beverage System campaign. A few of the senators were wholehearted support of the resolution and all of its specifications. A few considered some of the conditions to be either too specific, or asking too much of the University—such as the provision asking for a 20 percent reduction in the number of beverages sold in plastic bottles each year over the next five years. Others felt that certain measures would be too unpopular with members of the student body to pass the resolution—such as asking for the number of vending machines on campus to be drastically reduced.

**Student initiative process**

A breakthrough moment for the resolution occurred when I learned that with the signatures of at least ten percent of the student body, VSTEP would have the ability to bring the resolution before SGA to be passed as a student initiative. This option, a recent amendment to the SGA constitution, would signify that a legislation completely under the auspices of the students, and only undergoing a moderated process by the SGA. This development was very important, as it allowed the students responsible for the resolution to take significant authority over its fate, rather than compromising important elements to appease members of SGA.

In order to collect the requisite number of signatures—around 1300—I helped coordinate a petitioning initiative with VSTEP and any other students in support of the resolution. I printed out copies of the resolution and a signature sheet, along with a Frequently Asked Questions sheet for anyone newer to the campaign in need of talking points when collecting signatures. In roughly two weeks, members of the campaign collected over 1500 student signatures in support of the resolution—more than 12 percent of the student population at UVM (and, consequently, a higher proportion than those who had voted for the new student body president in the spring election of 2011).

Once VSTEP has a sufficient number of signatures, the resolution was brought back before SGA to seek a passing vote from their body. In previous presentations before SGA, I had played defense to various members of the body who had specific and at times divisive questions regarding the goals of the campaign. At the meeting where the Sustainable Beverage System resolution was introduced,
however, it was called to a vote with barely any dialogue or questioning, and passed by a slight majority.

**SGA Resolution**

The ease with which the resolution passed was essentially the only surprising element in an otherwise sound case. Confidence surrounding the resolution was built on several aspects, the first being the depth of the resolution itself. In drafting the resolution, I was intentionally thorough, building a strong case for beverage system changes through a litany of arguments, ranging from local and global problems, to relevant policies at the institutional and state level. Each individual claim was supported by a footnote of relevant information. (The final footnote count was 25). My intention had been to create a document that would be both educational to its readers, as well as a testament to the level of comprehensive research and analysis which had gone into the campaign overall. In essence, I had attempted to predict and answer preemptively any questions that could potentially have been generated.

Another strength of the resolution was the critical mass of student support that it represented. Many members of SGA expressed to me their support of the resolution, if not for the actual message it conveyed, then for the symbol of sheer student force represented by a wide mobilization of student support, and the evident effort put forth by VSTEP to collect this support. This fact, together with the thorough and comprehensive nature of the resolution, may account largely for the smooth passing of the resolution within an undoubtedly partisan body.

**Implications for the future**

Aside from resulting in a student sanctioned document that was more widely read by students than most other SGA resolutions ever written until its time, the petitioning process itself presented many priceless opportunities. Through this experience, members of VSTEP interacted with a broad, unfiltered sample of our peers. As we petitioned in popular spots on campus during weekdays and did not discriminate amongst which students we approached, we received a significant amount of informal feedback. It was very useful in further developing the campaign to have such varied input (both in support of and against the initiative) from students with whom we would not have been in contact under most circumstances (such as classes, VSTEP meetings, and social groups).

Through writing the first-ever student initiative to be passed by SGA, VSTEP may have set a precedence to be followed by groups of UVM students in the future. Previously, students had to rely on their student representatives, who might not have possessed the same level of literacy in a given subject as a group of students specialized in that subject, to pass resolutions that reflected their interests.

Alternatively, the Sustainable Beverage System resolution displayed a more direct form of student democracy, where comprehensively thinking students joined efforts to produce a respectable legislation, sought support from their peer students, and then defended its legitimacy before their representatives.
Discussion of working with SGA

While the result of my and VSTEP’s work with members of SGA can be overall considered a success, I faced some setbacks working with this body over the course of the campaign. Aside from matters previously discussed in the section on developing campaign values, there was the frustration of trying to give light to progressive measures while working with some individuals who saw their roles not necessarily as agents of change, but as student representatives, advocating for the needs and wants of their constituents – the student body. In this situation, VSTEP was treated as the lobbyist for a special interest group, rather than members of the student body with an equal right to be represented by our student representatives.

One issue with this approach is the fact that a representative democracy, like a free market, can only effectively work if there is full participation, and unfettered information flows. A systems approach to a situation is, by nature, extremely complex, and difficult to understand or make predictions about for even those studying intimately its individual parts for an extensive period of time. To assume that the majority of the student body has the perfect information needed in order to make the “optimum” decision in regards to social and environmental integrity, or that they would even care, is setting an impossibly high bar. Additionally, the SGA, as a body that had previously signed into existence two separate legislations calling for the administration to address bottled water at the institutional level had set a precedence to which any member of the student body was liable to hold them accountable. These are facts of which I reminded my senators frequently through personal meetings and as a speaker on public forum.

Additionally, would make the decision best for not only their own health but that of the exterior social and environmental realm is putting extremely high demands and, I would argue, putting decisions too important and with too severe of implications, in the hands of a largely apathetic/indifferent demographic.

B.4.5 Media coverage

Articles featured in the official UVM student publication, the Vermont Cynic, covering all three beverage-related campaigns (CRC, VSTEP, and the Students for a Sustainable Beverage System) can be found, chronologically, in the Appendix section. There is one article from the alternative campus paper, the Water Tower, and also several from the local papers, Seven Days and the Burlington Free Press.

Discussion of media coverage

Overall, external media publicity was not the top distributor of campaign information, and least of all information that was most salient or accurate. While articles announcing upcoming events may have been useful in augmenting the attendance at several events, the organizers found that most if not all publicity had to be taken on internally. The main points of the campaign were often missed or misrepresented by the published articles, which was another frustration of working with the campus media.
There are, however, many opportunities to use media sources to one’s advantage when running a campaign. Future organizers might consider submitting a letter to the various student newspapers, or giving more interviews on the broadcast channels. This is a surer way to guarantee that that the desired information is transmitted to the campus community, and in the way that organizers would like it to be received.

**Education**

In the continuation of this campaign, education will be one of, if not the most, important components for future organizers to focus upon. As VSTEP and those with whom we collaborated were essentially still configuring what precisely was the campaign platform and the ideal, measurable outcomes, there was not much time left in the semester to put a great amount of energy into an information campaign. Much of the group’s time and efforts were spent explaining the concepts and intricacies that comprised the campaign itself.

**Effective information**

Responses to educational materials varied depending on the topic. For instance, strong reactions were elicited by information explaining the specifics of the Sponsorship Agreement with Coca-Cola. For those concerned and appalled by the alleged practices of Coke, learning about the full extent of restrictions applied to the university by this agreement and the few and questionable benefits gained by it seemed to have a strong impact on their opinion of the contract. Additionally, the simplest pieces of information, such as a list of all beverage companies actually owned by Coca-Cola, elicited a strong response from some members of the community. This information at times resulted in disillusionment, especially of those consumers of Honest Tea or Odwalla who had been making their beverage choices based upon perceived health and socially conscious criteria, unaware that these two “responsible” companies were actually subsidiaries of Coca-Cola.

**Positive reinforcement campaign**

Taking the advice of many social marketing experts, we instituted a positive reinforcement component to our campaign as well. Every so often we held a tabling event called “Cookies for Conservation,” where we handed out baked goods to anyone who had their own reusable beverage bottle or mug to show us. This was a way to reward people for desirable behavior, as well as spur conversation about various ideologies, to share what we were doing as a group, and to collect feedback from others.

**Discussion and reflection on student organizing**

While this campaign has come a far way over the past year, there is still much work to do, starting with building more solidarity amongst the community. While there has been some substantial support expressed by many, there is undoubtedly a
sizeable population of students and other community members highly opposed to many of the aims of the sustainable beverage system initiative. Rather than focus on these divisive pieces, then, the outreach to come should emphasize aspects that are relatable and important to more of the community. Some of these aspects may be quite evident, such as a focus on personal health and wellbeing. To determine other uniting causes to champion, a stronger attempt at outreach in new and creative ways will be of high value.

An issue that came to light over the course of the campaign was that of ownership of sustainability initiatives in an institution of higher education – both at their initiation and follow-through to implementation. There are many great ideas circulating around a campus like UVM, and a small fraction of those are seen into fruition due to a multitude of variables. One clear roadblock to success of student initiated change, is the transitory nature of student organizers. With large changes

The leaders of the institution were adamant about receiving quantifiable data proving student support preceding any commitment to a change in policy. This had considerable implications, both positive and otherwise. It fuels the role of student organizers, presenting the impetus to do their homework, become immersed in the subject about which they care, and present a thoughtful, well-rounded and compelling case supported by credible information. It also charges students with the responsibility of coming together, building a movement, informing their peers, and bringing the issue home to those in the community who would not ordinarily think or care about these issues. A vocal minority may speak up loud enough to have an issue be addressed, but ultimately the goal of this group must be to stir change within the hearts and minds of those around them.

On the other hand, there are some areas of frustration that result from this doctrine. It first of all typifies an administrative norm to follow the status quo until a wall, or tipping point is met. Rather than proactively seeking ways in which the University can make changes in its beverage system that will positively impact the greater community, the administrators at the institution have shown students that they, themselves are the true drivers of change at the university. While the onus may still be on students to bring up the salient issues, the ultimate truth is that students are not given authoritative power in the university. Reactionary politics are a setback to change, mainly for the potential to discourage mobilization and action on the behalf of students, and any other community members opposed to current institutional rules and policy.

The tendency for stagnation at the administrative level leads many student activists to take increasingly partnership or collaborative roles with the administration. I myself can count these forays into demi-administrative roles on a full hand – beginning with my seat on student government, and up through my appointment on a Board of Trustees Work Group, the Meal Plan Task Force, and the President Student’s Advisory Committee. Even working with the Office of Sustainability, while a fulfilling and resourceful experience, in some aspect took away from my ability to fully connect with students, on the ground, to help build a sincerely grassroots campaign. Radical, in-your-face actions become less conceivable once a group of students have sat down with their administrators and see, for better or for worse, that they are just normal people.
Personally, I feel VSTEP became a much more politicized club over the course of this campaign. I feel strongly responsible for this, as I very much used my connections with the Office of Sustainability and the Student Government Association to propel the movement in certain directions. I also felt commonly restricted as a leader of VSTEP. I learned over this experience the limitations faced by leaders, in seeing certain desirable moves in the distance and wanting to steer the movement towards them, while recognizing the importance of group dynamics and solidarity in building a valid movement. I often had to practice restraint from making too many decisions for the group, and in allowing certain aspects to develop how they would, naturally. This was not always the neatest way to organize, but I firmly believe in the quote by ancient Chinese philosopher Lao Tsu, who evoked water as a masterful leader in that “All streams flow to the sea because it is lower than they are. Humility gives it its power. ... If you want to govern the people, you must place yourself below them. If you want to lead the people, you must learn how to follow them.”

Overall, I feel that the campaign has led to some promising results. The fact that members of the administration, and the rest of the campus community, recognize the term “beverage system” and are beginning to see it as such, are positive results. If there is true consideration into the creation of a campus beverage system policy committee, in tandem or in replace of a beverage contract committee that will be a very positive endeavor. If students are granted seats on this committee, this is even more promising.

Regardless of what happens at the administrative level, it is imperative that the community understands the issues driving this campaign, and their role in the beverage system as a whole. One largely delaying factor during the past year was in breaking down the group’s message into comprehensible pieces for anyone, regardless of their background and interests. This, however, was inhibited by the group itself being unsure for much of the past year about what it was that they were truly trying to accomplish. Spending much of the first year of this campaign dialoguing with different stakeholders and reflecting upon what was learned from these exchanges has allowed this campaign to grow secure roots before branching out. The next crucial step will be to disperse and build a firm coalition encompassing as many factions of the University community as possible – for this to be a successful endeavor, all parties’ understanding must be rooted in common beliefs and a shared vision.

It is no coincidence that the one facet of the campaign that raised a high level of consciousness and feedback (some of this may be witnessed in the student feedback section of the Appendix) was the message about banning bottled water sales. As an issue lacking true complexity on the surface, it is easier to conceive of a problem-to-solution scenario. While this is not meant to eclipse the importance of that measure as an institutional policy to be undertaken, it is just a reminder that the complex issues are those that are much harder to understand, and therefore easier to disregard – however, they are of such importance, because they usually contain the root to other, more symptomatic problems.
In the future, for this campaign to be understood and have an influential effect on public thought and actions, education must be rigorously and strategically implemented. The message must be clear, and easily relatable. There needs to be a connection made for the masses between what they choose to drink and their health, their finances, and the strength of their communities. Essentially, the connection must be made to their beverage choices and the quality of their lives. This may sound extreme, but it is no more than a reversal of the current marketing tactics employed by companies such as Coca-Cola, who ask their consumers to “join...in making a positive difference in the world by rethinking the way we live and work,” (“Live Positively,” 2011).
CONCLUSION

“...we change paradigms by building a model of the system, which takes us outside the system and forces us to see it as a whole.”
- Donnella Meadows, author of *Thinking in Systems* (P. 164, 2008)

“You never change things by fighting the existing reality. To change something, you build a new model that makes the existing model obsolete.”
- R. Buckminster Fuller (1895-1983)

The ultimate goal in leading a campaign for a Sustainable Beverage System at UVM was to examine the ways in which the beverages consumed by the UVM community affect both the community itself, and the larger global environment. There are obviously innumerable ways of approaching such an ambitious topic, and this project could only begin to touch upon but a few. The campaign for a Sustainable Beverage System will not be a failed attempt if each recommendation presented within the Resolution in Support of a Sustainable Beverage System is not considered or implemented at the institutional level; it would be naïve or misled thinking to believe that there is a simple equation, or a trajectory which may be followed in order to reach “sustainability” in any system. At the same time, to submit to the status quo, accepting that some issues are just “too complex” to be dealt with from their very core is also no way of seeking change and being part of a purposeful and supportive community.

Leaving this project in its still very nascent stage there are many open questions, each pertinent to the future of this, and any other initiatives seeking radical change at an institution such as UVM. A few of these questions are:

**What is sustainability?**

**What is the role of an educational institution?**

**What are the larger implications of this movement?**

When working to make a university more sustainable, it must be clear that the types of changes made at the institutional policy level may not be seen or appreciated from the very outset as changes leading towards sustainability. For instance, for many students there may be an initial disconnect between a policy that removes bottled beverages from sale on campus, and creating a more sustainable world. One truth about systems is that they operate through feedback loops; a new input into a system will not necessarily have an intuitive result immediately, or even after one or half a dozen circuits around whatever defined system is at play. This is especially the case in movements aimed at social change. Social change is inherently more complex than institutional or policy change, in that it is essentially a pre-requisite for any larger change. Historically significant revolutions in law and civic structure, from women’s suffrage to gay marriage in Vermont, had to be preceded
by the work of endlessly determined activists and painstakingly slow paradigm shifts just to reach the legislative level. Even at the “final stage,” the most prolonged deliberations could not match the amount of time consumed to get them there.

I mention this for two purposes. One is because I agree, as the famous French sculptor Auguste Rodin once astutely said, that “patience is also a form of action.” A major, system-based change will never occur quickly or through force. Having patience to see possibilities through over the long run, and flexibility to work through set-backs, or rather to never see them that way at all, is of prime importance in this campaign, and all others. There is little room for quick, ill-thought out decisions when a solid change of foundation is what guides one’s ultimate actions.

Secondly, I believe it is of utmost importance when planting the seeds of change in any system, but especially one with the intention of educating the youth of a society, that those involved serve justice to core, human values over fleeting institutional or cultural ones. To revisit David Orr’s essay on the purpose of education, he concedes towards the end that the apparent goal of the current educational model is to transmit and reinforce the instructions of mainstream society. According to Orr, a “successful” educational institution in this vein produces disciples reflective of the same cultural paradigms existent around them. He channels Ron Miller in his position that, “our culture does not nourish what is best or noblest in the human spirit. It does not cultivate vision, imagination...or compassion,” (Orr, 1991).

A sustainable beverage system, like a sustainable institution and a sustainable world, will not initially “satisfy” the desires of all within it – at least not the superficial desires. It cannot accommodate the current market values through which we are, in the words of Paul Hawkens, “stealing the future, selling it in the present, and calling it gross domestic product” (Commencement Address, 2009). It cannot help corporations (or any persons) profit off of Earth’s common resources, such as water – the elemental necessity for the existence of all constituents of this planet.

A movement towards a more sustainable beverage system can promote true standards of health and wellbeing, bring light to social justice, and encourage community engagement, global compassion, and ecological balance. Whether written out explicitly or not, these were the values encompassed by the framework of this campaign, and crucial to maintaining its integrity from here on out.
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