University of Colorado at Boulder
Housing & Dining Services

Sustainable CU: The Environmental Improvement Initiative

Proposal: Filtered Water Stations for Grab-n-Go operations
from CU Housing & Dining Services
January 29, 2008

1. Basic Organizational Information

CU Housing & Dining Services provides an exceptional residential and dining experience in support of the mission of the University of Colorado at Boulder.

Dining Services provides about 2 million meals to the residence hall students and guests each academic year.

Of these meals, about 685,000 meals (34%) are served through the Grab-n-Go operations. As part of this program, a large number of individual use (½ liter) water bottles are being used and ultimately end up in the campus waste stream and recycling program.

2. Primary Contact Person

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3. Project Description

"Aqua-consciousness" is the new buzzword on campuses and among environmentalists. In an effort to protect the environment, universities, schools, and institutions are looking at ways to provide filtered water stations instead of bottled water.

Given the amount of bottled water that our customers take with their Grab-n-Go meals, it makes sense to provide an eco-friendly (and healthy) alternative. Filtered water stations would be installed near our Grab-n-Go operations. These water stations will allow customers, residents and visitors to fill their own water containers with triple filtered water at no cost.

4. Project Scope and Timeline

The scope will include purchase, fabrication of cabinets and installation of filtered water stations in close proximity to our Grab-n-Go operations. In some cases, water lines may have to be routed to the appropriate location and new drains may need to be located. This work could be completed during the summer break, when grab-n-go operations are not utilized.

May 1	research design options & identify locations
May 10	identify scope of work for housing services
May 15	review and approvals
June 1	modifications on water supply and plumbing as required
July 1	installation of filtered water stations
July 15	final inspections

5. Project Budget

It is important to note that Dining Services does not receive General Fund money, but rather derives funding from meal plan fees. Therefore, Dining Services proposes to use monies from the Sustainable CU fund for purchase and installation of these filtered water stations. Ongoing filter replacement and maintenance will be the responsibility of Housing & Dining Services. We are currently investigating two brand names, and therefore figures below are estimates. We need to have a system that is "vandal proof", allows multiple customers to fill at same time and has easy access. Items in question include whether we serve chilled water.

Probable Cost for one water station:

Purchase Water filtrations systems	$1,000.00
Water filters	$ 500.00
Fabrication of cabinets	$2,000.00
Faucets/Spouts, 3 per station @ $120 each	$ 360.00
Plumbing changes	$ 500.00
Installation	$ 500.00
Total Budget, per station	$4,860.00
Under counter chiller/Carbonator (optional)	$3,500.00

Preferably, filtered water stations will be installed in three separate locations.

6. Environmental Impact

In 2006, Americans used 33.7 billion disposable water bottles .5 liters or smaller, according to the Beverage Marketing Corp., a company that monitors consumer trends in the beverage industry. The 2006 figure is an 18 percent increase from the amount in 2005.

The Earth Policy Institute, an environmental think tank, reports that it takes more than 1.5 million barrels of oil each year to produce America's supply of plastic water bottles. Transporting and refrigerating the bottles consumes additional resources.

Reducing the need to truck large quantities of bottled water to campus several times per week will have a positive impact on the environment, traffic on campus and pedestrian safety, as well as eliminate concerns about lack of storage for the bottled water.
Eliminating a large amount of water bottles used on this campus will have a tremendous impact on the environment and the campus waste stream as well as the recycling program.

7. CU Quality of Life
CU – Boulder has always been an environmental leader and looks for ways to decrease the ecological footprint. This project will help our campus create a more climate friendly, in addition to healthy, alternative. By providing the appropriate tools and business practices, along with outreach and education, our students, faculty, staff and visitors can move toward a minimal impact lifestyle.

8. Saving Money
In academic year 2006-07, HDS spent $126,000 on 555,408 ½ liter bottles of water for use primarily in our Grab-n-Gos. Although we currently plan to continue offering individual beverages in our Grab-n-Gos, it is our belief that with the addition of the filtered water stations as an alternative, and with appropriate education, customers will gravitate toward helping the environment and our cost will decrease conservatively by 10% in the first year and 30% in the second year. Even if our department does not save money, our university needs to make drastic changes to meet our goals of zero impact and implementing this tool is a major step in the right direction. Current operational practices may show in increase in food cost, due to students taking additional side dishes.

9. Project Longevity
The estimated life span of these filtration units is 10-15 years.

10. Social and Environmental Equity and Justice.
The installation of these water stations is equally beneficial to all users of the buildings in which they are implemented, as well the entire campus community.