

SUSTAINABILITY INITIATIVES BY STUDENT ORGANIZATIONS FUNDING PROPOSAL

Part I - General Information

Name of Student Organization	UAP Course 3354 – Introduction to Environmental Policy and Planning
Contact/Responsible Person	Connor Sexton, Matt Lacey
Contact Office Held/Title	Office of Sustainability
Contact Email Address	conbon1@vt.edu , laceym8@vt.edu
Contact Telephone Number	717-480-3770, 614-365-1275

Part II - Project Cost Information

Estimate Cost of this Proposal	\$5,000	See Part III.C
Estimated Savings –	\$ 19 in year 1	See Part III.D
Net Cost of this Proposal	\$4,981 in year 1	

1 of 2 stations
funded

Part III - Supporting Information

A. Please describe your sustainability initiative and attach supporting documentation.

Our sustainability initiative focuses on the water fountains in Derring Hall. We want to fund two water bottle refill stations, as the vast majority of the fountains are deteriorating or cease to operate. Installing water refill stations would be a wise sustainability initiative for several reasons, the primary being the reduction of waste from plastic water bottles. On the 2nd floor of Derring, there were 4 water fountains (2 doubles, 2 singles). The doubles are installed in corners of the building in low traffic environments, which is obviously inefficient. We suggest leaving the two double fountains as they are, as the cost of uninstalling/reinstalling new fountains would be too costly. We want to replace the two single fountains, as they are in high traffic areas (one is very close to the Geoscience Museum).

B. How does this initiative help to achieve the goals of the Virginia Tech Climate Action Committee Resolution and Sustainability Plan?

The installation of these stations would help Virginia Tech become a leader in campus sustainability and foster knowledge and appreciation for environmental stewardship (Goal 1). They would also improve energy efficiency by replacing the older model fountains, thus reducing our environmental impact (Goal 4). Lastly, Virginia Tech will work to provide funding to support sustainability programs (Goal 14).

C. What is the cost of your proposal? Please describe in adequate detail the basis for your cost estimate.

Recommend using the Elkay Water Bottle Refill Station single unit for the two locations. The \$5,000 total cost was provided by the Facilities Department Project Coordinator Jim McDaniel who has extensive experience in the placement of similar units on campus. The \$5,000 includes the cost of the two units, the installation cost, the electrical costs, and contingency.

D. Will your proposal produce cost savings for the University? If so, how much? Please describe in adequate detail the basis for your savings estimate.

According to the 2014-2015 Academic Water Bottle Refill Station Green RFP prepared by Sustainability @ VT, the water filling station in Squires Student Center and Newman Library were installed in the late spring semester of 2011. The digital counter on the stations was an average of 11,929 bottles per station as of October, 2012. This number represents 5 months of plastic reduction for one water bottle station. One school year (9 months), [11,929 bottles) / (5 months)] * (9 months) = 21,472 bottles per station

This proposal requests funding for 2 stations. Using the calculation above, we would expect to have (21,472 bottles per station) * (2 stations) = 42,944 bottles for the 2 stations.

According to the International Bottled Water Association's website, the average gram weight of the 16.9 ounce "single serve" bottled water container is 12.7 grams. The weight of the plastic bottles not used from one water filling station is 272,697 grams per school year. The total weight in grams of the plastic bottles not used from the two proposed water bottle filling stations in one school year is 545,389 grams. There are 907,185 grams in a ton. This results in a weight of 0.6 tons per school year.

(21,472 bottles per station) * (12.7 grams) = 272,694 grams

(42,944 bottles) * (12.7) = 545,389 grams

(545,389 grams) / (907,185 grams per ton) = 0.6 tons

The university pays about \$32 a ton for single stream recycling. . Each year the university will save \$19 (\$32 * 0.6).

E. Is this funding request an Ongoing or One-Time change (please check one)?

One-time

Ongoing

F. Is funding available for this request from another source? If yes, describe the funding (source, amount, etc.)

No.

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Part IV- Requestors/Reviewers

Connor Sexton, Matt Lacey

Prepared By (Name of Student Organization)

Date: 11/17/2017

Jim McDaniel, Facilities Department Project Coordinator

Reviewed By (Name of Appropriate University Official)

Date 2/15/2018

Denny Cochrane, Sustainability Program Manager, Office of Sustainability

Reviewed By (Name of Office of Sustainability Representative)

Date 2/15/2018



One of the older fountains on the 2nd floor of Derring Hall.



- ADA Compliant
- Green Spec Certified
- Cooling Unit
- Temperature Control