Memorandum

Date: November 26, 2013

To: Land Use Committee

CC: Jon Jenson

From: Elizabeth Reed, Megan Kresse, Kelli Golinghorst, Environmental Philosophy Students

Re: Campus Rain Barrel Project, Phase II

Introduction

Within the last five years, Luther College has made great strides towards becoming an institution that values sustainability and environmental stewardship by implementing a wind turbine, a solar field, edible gardens and even a 1,500-gallon rain barrel. Our project looks to expand Luther’s commitment to the environment and more specifically rainwater management by installing another, smaller rain barrel off of a downspout in the corner of Valders, near the edible garden. Not only would this rain barrel be consistent with Luther’s sustainability mission, but it would also act as a means of storm water management, student education, and land beautification.

Background

Luther’s current rain barrel is located off of Storre Theater and after a decent rain, can meet the college’s watering needs for approximately one week. While this location perfectly fulfills the needs of the Grounds Crew in terms of scale and accessibility, this rain barrel cannot easily and conveniently be used by students, nor does this location serve educational or beautification purposes.

Proposed Work

Description:

We propose installing a 65 gallon rain barrel, which can be bought locally in Decorah, to the gutter system already installed at Valders. The barrel will catch rainfall off of the Valders roof throughout the spring, summer and early fall, which could the be used by students and Grounds Crew workers to water any non-edible plants around that area of campus. It could also potentially be used to water the edible garden depending on toxicity levels. Besides adding another element of sustainability to Luther’s campus, the rain barrel also contributes to campus beautification and students’ sustainable education.

Location:
The rain barrel would be installed along the southeastern wall of Valders just outside the edible garden, where it would be easily visible to any students using the garden yet not a campus eyesore. This location was chosen because of its proximity to the edible garden and its visibility from the sidewalk, as well as its potential for collecting significant water due to the large downspout. We want to expose students to sustainable practices that can be used on a small scale, such as a household rain barrel, and this location would be ideal. In addition, in this location it would be easy for Grounds workers or any students to access and fill containers to water plants. It would also require no extra installation of a gutter system since one is already there. (See Appendix)

**Potential Uses:**

The rain barrel could easily be installed in the spring, then used to water the potted plants, trees, and shrubs near Valders and possibly the plants in the edible garden. It is easily accessible by patrons of the greenhouse, garden workers, Grounds Crew members, and students.

**Labor:**

Since our proposed rain barrel is small, installation could easily be done by a few people from the Grounds Crew, who would then maintain it during the growing season and clean and store it over the winter. Perhaps the hardest part of the installation process would be connecting the barrel to the existing gutter.

Since the current rain barrel is stored in the Ashmore-Jewell Barn, it would be easy to also store our much smaller proposed barrel there as well.

**Costs:**

The rain barrel we are proposing is much smaller and less costly than the one already on campus. It is a 65 gallon barrel that can be found at the local Ace Hardware store. If the project is approved by the Land Use Committee we plan to then apply for a Sustainability Center grant to obtain the necessary funds.

Time investments required include installation, weekly maintenance of the mesh guard, and preparing the barrel for winter storage, all of which can be conducted by Grounds workers.

The proposal budget is as follows:

- 65-gallon Rain Barrel—$99.99
- Diverter Kit (used to connect the barrel to the gutter)—$43.99

Total Cost—$143.98

**Rationale**

The following is an outline of what we have identified as the five most significant benefits of our proposal:

*Sustainability:*
At this point it should be clear that installing another, smaller rain barrel near the Valders Greenhouse and Valders Edible Garden perfectly aligns with Luther’s mission of sustainability, both as a duty to the institution and to students.

*Aesthetics*

Our proposed location is easily accessible, yet relatively hidden so as not to cause an eyesore on campus. Most importantly, this location is more centralized on campus rather than contained with the Grounds Crew/Storre Theater area, which aesthetically communicates to students, staff, and visitors Luther’s dedication to the environment. Furthermore, we would like to see a student paint the rain barrel, perhaps using the surface to demonstrate the water cycle or life cycle of plants and animals, as a means of increasing its aesthetics and contributing to the beautification of campus. It could even become a “talking point” for Admissions tours.

*Education and Awareness*

Because the cost benefit analysis of this proposal is relatively insignificant due to inexpensive water in this area, our main goal for the project is to expose students to easy, affordable, and sustainable practices that can be employed in their own lives after Luther. Our proposed location is convenient for students and so the rain barrel would work towards accomplishing this goal. In addition, any artwork on the barrel would increase its educational value.

*Improves plant and tree quality*

Perry Halse, whom we meet with and discussed our proposal, is a Grounds Crew Supervisor and is in charge of all of the landscaping on campus. He admits to noticing a significant difference in plant and tree quality when such landscapes are watered with rain water from the current barrel rather than Decorah water.

*Storm water management*

Rain barrels effectively collect rainwater that would otherwise contribute to runoff that pollutes our streams, rivers and other water sources.

**Conclusion**

Our proposed rain barrel has many benefits to the sustainability commitment of Luther College and its role as an institution of higher learning. It would improve the college’s commitment to sustainability now and would teach sustainable practices that students could implement for the rest of their lives. The rain barrel would be a visual communication of the college’s dedication to sustainable innovation. Students and community members would get the chance to gain experience using an alternative and more sustainable watering option. Additionally, the rain barrel would be a beneficial method of stormwater management that is well worth the investment.

**Resources**

*Contacts:*
Perry Halse (Grounds Crew Supervisor)-halspe01@luther.edu
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Appendix

Figure 1. Our proposed 65 gallon rain barrel from Ace Hardware.
Figure 2. The proposed location for the rain barrel on the southeast side of Valders Hall of Science.