POST OCCUPANCY EVALUATION

BASELINE INFORMATION

PROJECT NAME: Rain Water Catchment: Educational System on the UW Farm
LOCATION: Adjacent to the Botany Greenhouse and Burke Gilman trail. (15th Ave NE and NE Pacific St, Seattle, WA 98115)
AWARD MADE: April 2012
PROJECT COMPLETED: June 7, 2012
DURATION (MONTHS): 2 months
AWARD TOTAL: $465
AWARD SPENT TOTAL: $465
% SPENT: 100%
PROJECT MANAGER(S): Brittany Bear, Erica Isomura, Tory Johnson and Alana Yurich (students)
CONSULTANTS: Beth Wheat (UW Farm Education Coordinator and one of the farm founders), Doug Ewing (former Botany Greenhouse Manager) , Julia Reed (former UW Farm Student Coordinator), UW Farm students (Farm Vision Team and student volunteers)
SIZE (SQ FOOTAGE, ACREAGE): 15 sq. ft. roof (3 ft. × 5 ft) with 13 inch pitch, 40 gallon tank at base

PROJECT PROFILE

SITE & CONTEXT: The Rain Water Catchment is located on the Burke Gilman Trail, across NE Pacific from the Health Science Building and adjacent to the Botany Greenhouse at the UW Farm's Botany Greenhouse site.
PROGRAM ELEMENTS: Development of a working demonstration rainwater harvesting system capable of collecting 250 gallons of water per year for a public signboard beside the Greenhouse and the Burke-Gilman trail.
MAINTENANCE / MANANGEMENT REGIEME: According to UW Farm volunteers, little if any. Anyone on the farm, volunteer or staff, is allowed to collect the water out of the catchment system and use it for irrigating plants on the farm. An overflow component is installed so regular drainage is not required. The intake connection between the barrel and the gutter should be checked 1-2x/year to mitigate any clogging.

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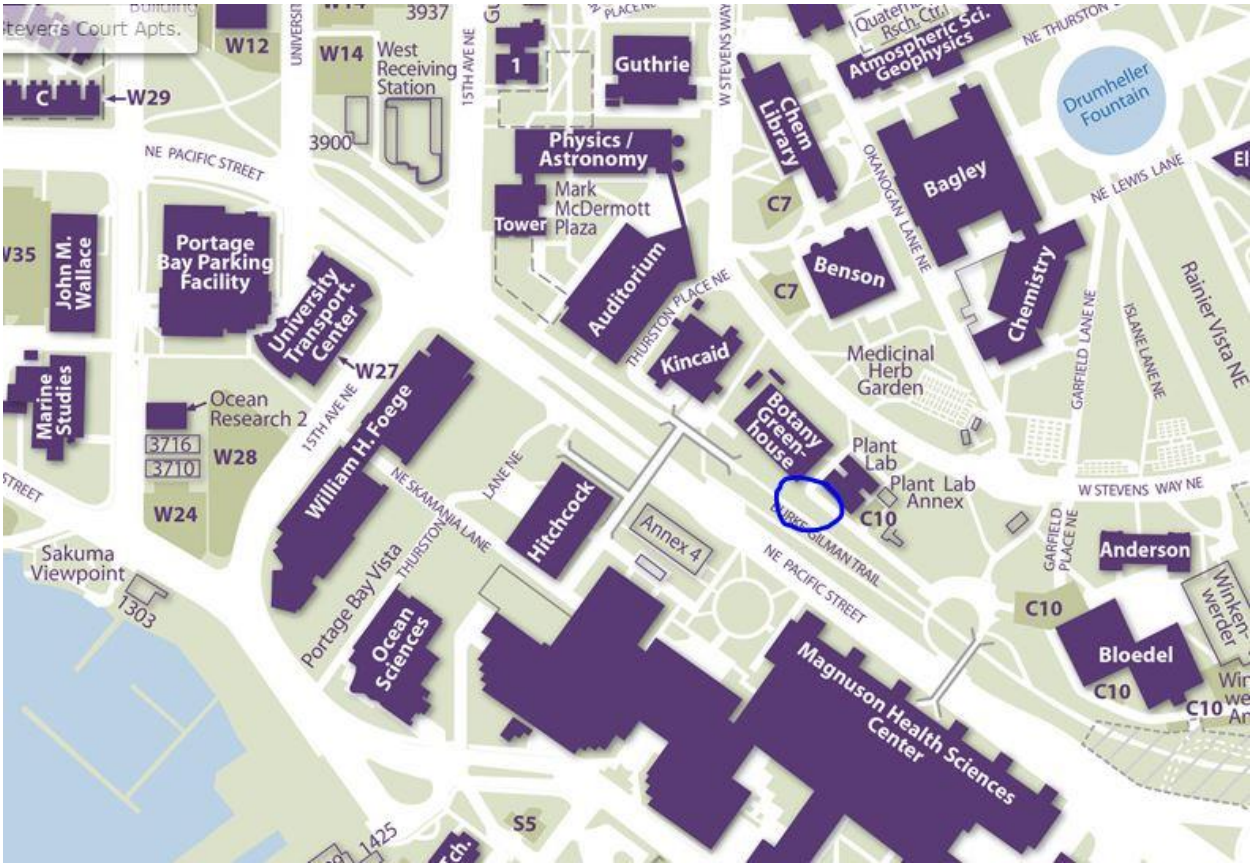
PHOTO(S):

POST OCCUPANCY EVALUATION



PLAN(S):

ANALYSIS

USER/USE ANALYSIS: According to Doug Ewing, former Botany Greenhouse manager, a rainwater catchment system is not immediately necessary for the facility. "*There is no pressure from the University for the Greenhouse to be particularly water-conscious or to find alternative methods of irrigation."* However, Doug anticipates metering of water use within his department in the short term the coming years, at which time water capture will likely become a more embraced notion amongst his managers. The project has been vandalized considerably over time (see photos above), perhaps due to its highly public location. A simple new coating of paint should fix this issue.

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PEER REVIEWS:
Email from Brittany Bear (a project lead) to Jamie Rowe (former CSF coordinator) re: project errors/issues (10/22/2012)
"We have completed construction for the most part. There are a couple things that I would like to go back in and fix, but they are all minor things."

General critique of rain barrels in Pacific Northwest, from Sightline Institute, a locally respected environmental policy communications and research firm (full text here, from 2006…)
"The problem with the rain barrel, as you might guess, is that there's not much need for it most of the year. The water isn't drinkable (because it's sluiced off the asphalt shingle roof), so it's useful mostly for watering plants. And from the look of things, my plants have plenty of water right about now. In the Northwest's dry summer, of course, things are a different matter. Plants need lots of extra water—unless they're well established and drought tolerant—but then there's not nearly enough water in the barrel to go around. Maybe what I need is a really, really big barrel."

CRITICISM: The Botany Greenhouse was somewhat reluctant to partner on compromise on a small-scale water harvesting system shared with the UW Farm at the time of the project proposal (~January 2012) given the relative inability of the demonstration project to meet their needs. Section 3.7 of the CSF Bylaws states: *"In considering projects that are undertaken by campus departments (whether in close partnership with students or led primarily by staff), CSF prefers to use its funds strategically, investing in one-time transformational interventions in a campus operation, rather than funding routine operations or planned near-term innovations. In considering projects undertaken by campus departments, preference will be given to projects that demonstrate they are not likely to be undertaken in the near future without CSF funding, and are likely to be financially and operationally sustainable over the long term."* Given the Sightline critique above, it can be argued that this project is not a transformational intervention.

PROJECT SIGNIFICANCE / UNIQUENESS: Although small, the project remains significant because it provides an educational component for farm volunteers to use to edify students, staff and the public on the system.

FUTURE PLANS: While the UW Farm plans to continue to use the water harvesting system as they do currently, the Botany Greenhouse secured a $77,365 award from the CSF in May 2013 to install a large scale rainwater harvesting feature in a full greenhouse rebuild, scheduled for completion in June 2018.

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FOLLOW UP

CONTACT INFORMATION: uwfarm@uw.edu
WEB SITE: https://www.facebook.com/UWFarm

PERFORMANCE

Please fill in all fields applicable to your project and for which you have data

NUMBER OF…

- ACRES
- ANIMALS SERVICED
- ATTENDANTS
- BIODIESEL PRODUCED (GAL.)
- COMPOST PRODUCED
- FOOD GROWN (LBS.)
- HOTSPOTS IDENTIFIED
- HOURS WORKED
- PAGES
- **3 professional reviewers and several peer reviewers**
- PLANTS INSTALLED
- RIDES DIVERTED
- **1 (CSF: Post Occupancy Evaluator)**
- SQUARE FOOTAGE
- STORMWATER DIVERTED
- STUDENTS ENGAGED (VOLUNTEERED, EMPLOYED, ETC.)
- TOTAL kWh GENERATED
- **1 unit installed**
- **1 user(UW Farm)**
- VIDEOS PRODUCED
- WASTEWATER CAPTURED & TREATED
- **250 gallons of water saved**
- **http://green.uw.edu/promote/snapshots/rainwater-catchment-uw-farm**
- **https://www.facebook.com/UWFarm**

BEFORE & AFTERS…

- BUILDING TEMPERATURE
- KWh CONSUMED
- SOLID WASTE CONTAMINATION