

Working for a
GREENER 

Fall 2010 - Spring 2011

Sustainable Campus Initiative Fund
Annual Report





"The "Solar Parking" team was able to assemble a detailed analysis of the financial implications of the project as well as quantify the environmental factors in a measureable way, and they completed a marketing study of about 4,500 respondents to gauge the social acceptance of building solar plazas in parking areas around campus. The end result was an unbiased evaluation of the "Triple Bottom Line," financial, social, and environmental impact. Their report provides the necessary tools to make an educated decision about whether to move ahead, and what the benefits may be. This kind of partnership benefits the University and community in a win-win relationship. The Sustainable Campus Initiative Fund was a key element to making this project happen, and I look forward to partnering with The Office of Sustainability in future projects."

**Jeff Brown, Director,
MBA Field Study Program**

Working For A Greener U

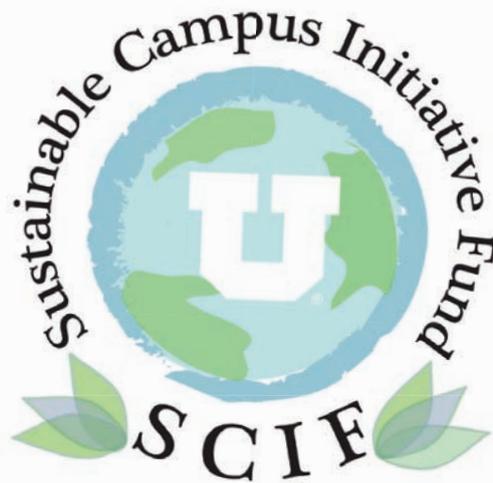


Sustainable Campus Initiative Fund

The Sustainable Campus Initiative Fund, also known as SCIF, oversees competitive grants for student projects focused on sustainability education and energy efficiency at the University of Utah. SCIF's mission is to provide funding for real-world projects that improve the University of Utah's environmental quality and make the campus more sustainable.

SCIF is rooted in student's engagement with environmental issues. University of Utah students voted overwhelmingly in favor of the student driven campaign to pay \$2.50 of their tuition each semester into SCIF. This popular program gives every student the opportunity to apply for a grant to plan and implement a sustainability project on campus.

Since the program's inception in January 2010, SCIF has funded 37 innovative projects.



Contributors

*Thank you to our Committee Members
and staff for their dedication and ideas.*

Committee Members

Cory Higgins

Director, Plant Operations

Cheryl Henson

Office Supervisor, Support Services at University Hospital

Mark St. Andre

Assistant Dean, Undergraduate Studies

Norah Olley

Undergraduate Student, Environmental Studies

Tim Harrison

Graduate Student, Masters of Public Administration

Julie Harper

Undergraduate Student, Environmental Studies

Maziar Nourian

Undergraduate Student, Pre-Medicine

Robert Young

Professor, College of Architecture

Tami Beck

Senate Chair, ASUU

Staff

Myron Willson

Director, Office of Sustainability

Whitney Williams

SCIF Coordinator, Office of Sustainability



Introduction

We are delighted to share the new Sustainable Campus Initiative Fund projects with you. This year, we were able to support 22 enterprising student projects encompassing all things green on campus.

Our second year has been a year of many firsts. The first campus rain garden was completed and has been successfully filtering storm-water runoff and watering native plants for two summer seasons. We had the largest request for funding last spring, exceeding \$200,000 in projects. The first Social Soup Lecture Series began and has developed into an interdisciplinary event that will expand the discussion of food issues for years to come. And we will be the first university in the nation to adopt the revolutionary technology *Solar Ivy* that will generate clean renewable electricity on campus.

These firsts have exemplified the wide umbrella SCIF has cast over the University of Utah. We have students working on pilot studies for new technologies, performing financial analyses, creating cross-cultural learning communities and bringing new sustainability events to the campus. When I was writing this report, it struck me more strongly than ever that SCIF is more than a program for environmentally-focused students. Look for yourself and you'll see students in sociology and chemistry working on complex sustainability issues across campus.

We have also learned that SCIF students are an extraordinary group of student leaders. They see an environmental wrong and decide to take individual action to right that wrong. While we are grateful for their dedication to sustainability, we also know that they are gaining invaluable job training skills while working on their SCIF project. Environmental Humanities student Ross Chambless said it best. "I learned everything from caring for fruit trees in orchards and maintaining river irrigation to advertising and organizing a large volunteer work trip."

SCIF projects are doing much more than fostering student leaders. They are real-world examples how students can help the university reach its environmental goals. Our initiatives have reduced waste, improved recycling rates, lowered electricity consumption and increased local food production, which have all contributed to university moving towards water and carbon neutrality as outlined in the Climate Action Plan. SCIF projects have inspired innovation, provided experience, and fostered relationships, all developing a culture of sustainability at the University of Utah.

Whitney Williams

Sustainable Campus Initiative Fund Coordinator



Contents

Highlights	02
Impact	03
Innovation	05
Green Titans.....	06
Air Me Up.....	07
Ice Ball Cooling System.....	08
Rain Garden Optimization.....	09
Fix-It Bike Racks.....	10
Greening OSH.....	11
Marriott Library Filling Stations.....	12
Mercury Thermometer Exchange.....	13
Social Soup.....	14
Solar Ivy.....	15
Experience	17
Bike To The U.....	18
Garden Leaders.....	19
Honors Housing.....	20
RecycBike.....	21
Solar Parking.....	22
University Student Apartments.....	23
Relationships	25
Campus Hydration Stations.....	26
Bennion Center.....	27
Garden Supplies.....	28
Skate Station.....	29
Huntsman Garden.....	30
Social Justice Gardens.....	31
Zero Waste Lunch.....	32
Updates	34
Partners	35
Map	36

Innovation

Fix It Yourself Bike Racks

Building a network of bike repair stations on campus



Location: Heritage Center and Field House



Project Executives

James Allen, Sophomore in Chemistry and Material Science

Project Advisor

Chad Larsen, Manager, Commuter Services

Community Partners

Commuter Services
THE UNIVERSITY OF UTAH

“Over 400 students, faculty and staff commute by bicycle on a daily basis.”
-Chad Larsen, Project Advisor

Project Overview

Riding a bike is supposed to be a fun and healthy activity. However, sometimes there are a few bumps in the road and at the most inconvenient time a tire will pop or a chain can break. To help fix those minor set-backs, the University of Utah campus is now equipped with “Fix-It Yourself Bike Racks”. The racks are equipped with a repair stand, air pump and basic tools for changing tires and working on brakes.

Impact

Bicycling is a convenient and healthy mode of transportation. Making it easier for people to bike to the U will help the University reach its air pollution and carbon reduction goals from single-occupancy vehicle use as stated in the 2010 Climate Action Plan. This student led initiative inspired Commuter Services to install additional racks on campus.

Budget

\$2,700 went towards two new racks.



Greening OSH

Taking the Environmental Studies offices from bleak to inviting

"This project will demonstrate how OSH can be made green, attractive and inviting without being knocked down."

-Natasha Seegert, Project Executive

Project Overview

The greening of OSH is an example of how older buildings can be retrofitted to become healthier and environmentally friendly. The traditional solution to older buildings is to level them or to do an expensive remodel. Natasha Seegert, Project Executive, decided to focus on the Environmental Studies office. Changes made were: utilizing natural American Clay for walls, applying 3Form panels to take advantage of natural day light, installing LED light fixtures and reusing and restoring older furniture.

Impact

By using natural light and efficient light fixtures, the offices will reduce their energy consumption. They will also have planter boxes and use zero VOC (volatile organic compounds) paint to help clean the indoor air. Hundreds of students visit the Environmental Studies offices each semester and will see examples of sustainable design practice. This can also be a model for sustainable practices as departments around campus consider making retrofits to their older offices.

Budget

\$9,000 went towards the necessary supplies to make a brighter, healthier work environment.

Innovation



Location: Orson Spencer Hall,
first floor



Project Executives

Natasha Seegert, Associate Director of Environmental Studies and Ph.D candidate in Communication Studies

Project Advisor

Dan McCool, Professor and Director of Environmental Studies Program



Marriott Library Filling Stations

Creating an infrastructure for reusable water bottles on campus



Location: Marriott Library, 1st floor



Project Executives

Karren Nichols, Sustainability Coordinator, Marriott Library and Junior in Sociology

Project Advisor

Ian Godfrey, Operations Administrator, Marriott Library

Community Partners



“Over 1,200,000 people use the library every year.”

-Karren Nichols, Project Executive

Project Overview

Karren Nichols, sustainability coordinator for the Marriott Library, set as a goal to reduce the number of plastic water bottles consumed at the Library. To make it easier for people to fill their reusable water bottles, Karren helped to install the first water bottle filling station in the library. The water is cold, filtered, quickly dispensed, and, best of all, free to users.

Impact

The library staff has been tracking the number of plastic bottles recycled in order to track the impact. The goal is to reduce the amount of number one and two plastics being recycled because more students will be using reusable water bottles.

Budget

\$5,000 will go towards the new filling station as well as an awareness campaign to educate students and library patrons about the environmental impact of plastics and how they can help by using a refillable beverage container. Results of work will be available next year.



Mercury Thermometer Exchange

Working to make the U a mercury-free zone

"We feel that this project is moving forward well and in a positive manner. We are excited about the progress we have made and are looking forward to the continued acceptance of this program."

-Nikki Nalder, Project Executive

Project Overview

In an effort to make the University of Utah a mercury-free zone, Environmental Health and Safety (EHS) initiated the Mercury Thermometer Exchange program. Mercury, a hazardous chemical and known neurotoxin, is the common component in thermometers used in labs across campus. EHS hired Environmental Studies student Tyler Soukup to initiate the first phase of the exchange. Tyler worked with the School of Medicine to bring alcohol thermometers into the labs and safely dispose of the mercury thermometers.

Impact

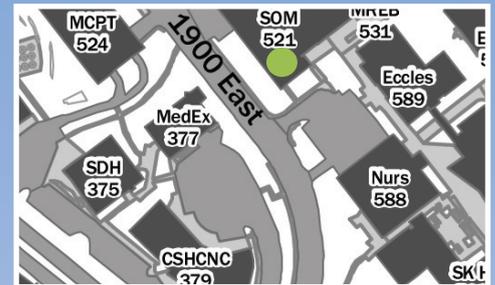
In the last four years, Environmental Health and Safety has spent over \$2,000 on the clean-up and disposal of broken mercury thermometers. Mercury is a toxic substance so removing the thermometers will not only save EHS money and time, but create a safer work environment.

Budget

\$10,200 was used to dispose of the mercury, purchase the new thermometers and fund Tyler's internship.



Innovation



Location: School of Medicine



Project Executives

Tyler Soukup, Junior in Environmental Studies

Nikki Nalder, Hazardous Materials Manager, Environmental Health and Safety

Project Advisors

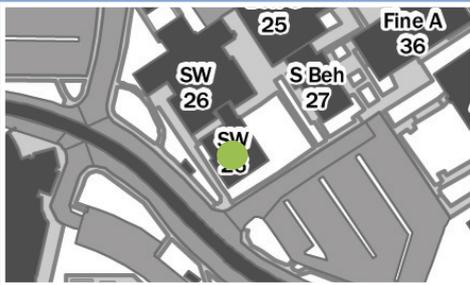
Marty Shaub, Director, Environmental Health and Safety

Michele Johnson, Associate Director, Environmental Health and Safety

Innovation

Social Soup Lecture Series

A monthly reflection on social, environmental and economic issues surrounding food



Location: Goodwill Humanitarian Building



Project Executives

Abigail Salmon, Graduate Student in Environmental Communications

Project Advisor

Naomi Silverstone, Research Associate Professor, College of Social Work

"A sense of community is created through the sharing of a meal and the repeated participation of some students is evidence of the positive effects this can have."

-Abigail Salmon, Project Executive

Project Overview

Professor Naomi Silverstone came to the Office of Sustainability with the idea for a discussion series focused on food issues. Naomi's idea, loosely based on a program at the University of Illinois, Chicago, became a reality in September 2010 when the first Social Soup lecture series launched. Naomi formed a steering committee and collaborated with University departments and community organizations to bring key lecturers to campus, like Mark Winne and Jill Richardson. Social Soup has been adopted by other University departments and will continue for the 2011-2012 year.

Impact

Education and discussion can lead to healthier, more sustainable food purchasing habits and more support of local farmers and food pantries. The high attendance at the event, ranging from 60-100 people, shows that food is something everyone can relate to and engage with. It also has become a gathering place where ideas can be exchanged which is the bedrock of innovation.

Budget

\$4,100 provided support for the event including the space and funding for national speakers.



Solar Ivy

Bringing innovative, sustainable energy generation to campus

"This project will push for using and creating new forms of energy to power our buildings and homes."

-Tom Melburn, Project Executive

Project Overview

The University of Utah will be the first campus in the nation to install Solar Ivy, thanks to Environmental Studies student Tom Melburn. Solar Ivy is a revolutionary form of photovoltaic panel that harvests the sun's energy to create electricity. The solar panels are shaped like artistically fashioned ivy leaves and will adorn a exterior wall on campus.

Impact

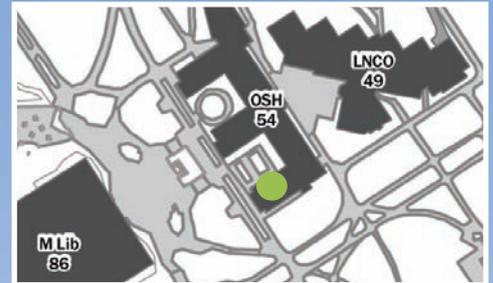
The energy will be directly tied to the grid which will lower the University's bill for utilities and lower the amount of climate change pollution produced by our purchased electricity. Over 20 years, the installation will offset the GHG emissions of 8 average U.S. homes.

Budget

\$30,000 will fund 2/3 of the system. A campus community fund drive will raise the remaining funds needed to initiate the project.



Innovation



Location: The south façade of Orson Spenser Hall



Project Executives

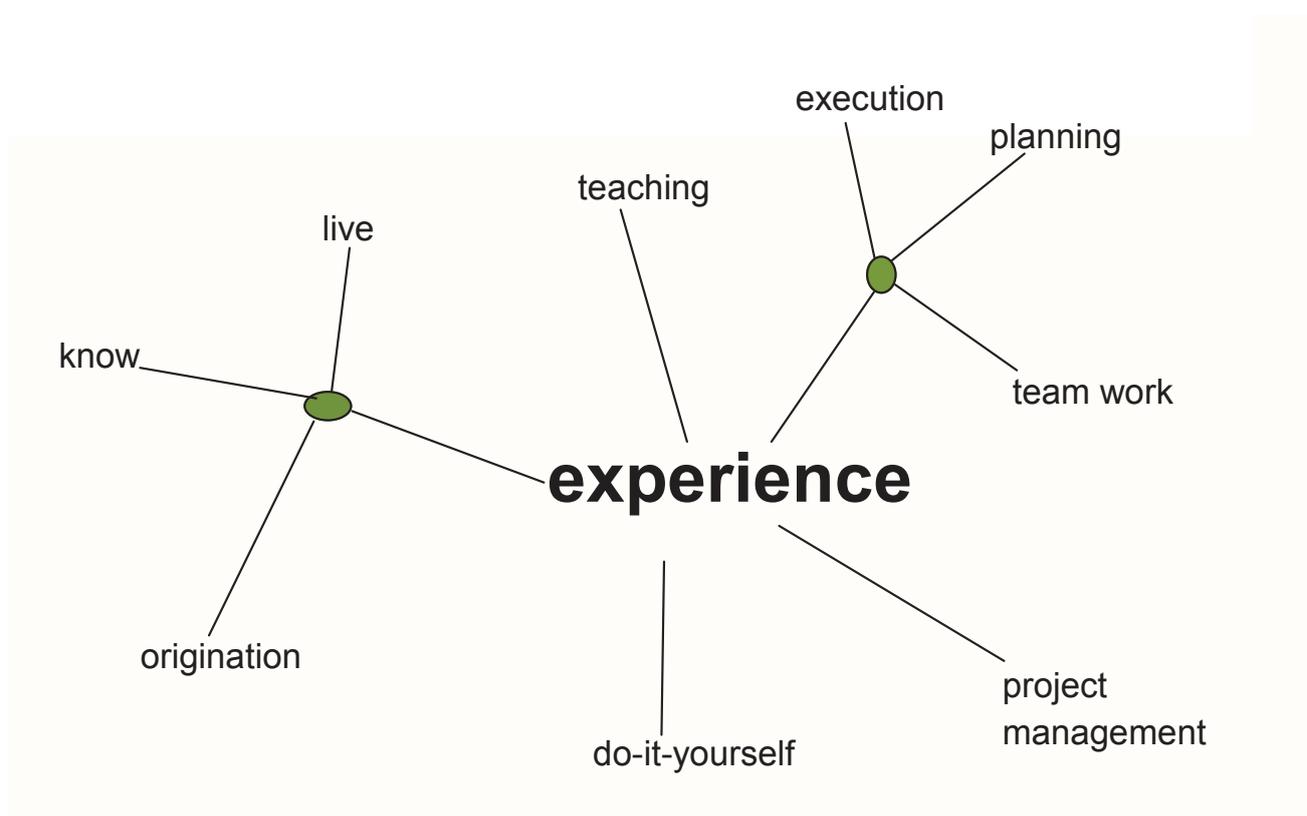
Tom Melburn, Junior in Environmental Studies

Project Advisor

Dr. Kent Udell, Professor in Mechanical Engineering and Director of Sustainability Research Center

Experience

ex•pe•ri•ence — *n* knowledge or practical wisdom gained from what one has observed, encountered, or undergone



Students are leaders in designing and implementing their SCIF projects, gaining valuable hands-on work experience.

Experience

Bike To The U Day

An event to show appreciation for bike commuters and encourage others to join the club



Location: Bikers are welcome to come from all over and the event will be held at the Union Plaza on September 7, 2011



Project Executives

Lynn Unger, Graduate Student in Social Work

Project Advisor

Dr. Rob Butters, Professor, College of Social Work

Community Partners



"If everyone who lives within 5 miles of their workplace were to cycle to work just one day a week and left the car at home, nearly 5 million tons of pollution would be saved every year, the equivalent of taking a million cars off the road."

-Lynn Unger, Project Executive

Project Overview

The first annual Bike to the U day will be on September 7, 2011 thanks to Lynn Unger. When Lynn lived in California, her favorite day of the year was a day that celebrated bicycle commuters. She decided to bring that event to Utah to show appreciation to dedicated bicycle commuters as well as encourage first-time riders to put on their helmets and ride to work. The event will include local business sponsors and a Bike Awareness evening on September 6th. The Union Plaza will be filled with information about proper bicycling behavior, safety, and gear for new bicycle commuters.

Impact

For every mile a person rides on a bicycle instead of driving alone in a car, about one pound of pollution is kept out of the air. This event will promote an increase in bicycle commuters to the University of Utah as well as showcase bicycle initiatives on campus such as the Fix-It Yourself Bike Racks (Pg. 10) and the student-led Bike Collective.

Budget

\$3,500 went to marketing and outreach materials for the event. Funds were also used for bike bags and U car memberships to be raffled off to event participants.



Edible Garden Student Leaders

Developing the campus garden program

"Our goal is to train student leaders so they can understand the complex social, political and environmental issues revolving around food"

-Alexandra Parvaz, Project Executive

Project Overview

The Edible Campus Garden project began as a student idea and has evolved into a thriving production. This grant will employ two student leaders who will gain experience with program development, volunteer coordination, and garden maintenance for the 2011-2012 growing season. These positions will help foster a sense of community within the garden program and train future student leaders for these roles.

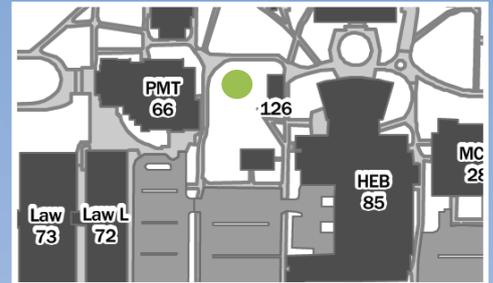
Impact

The student leaders manage over 500 hours of volunteer time where community members and students alike gain hands-on experience in organic gardening. This grant will also allow the garden coordinator to spend more time on procuring funds to sustain the garden program.

Budget

\$6,450 will go towards two student positions.

Experience



Location: Pioneer and Sill Center Gardens



Project Executives

Alexandra Parvaz, M.S., Campus Garden Coordinator

Project Advisor

Jen Colby, Coordinator, Office of Sustainability

Community Partners



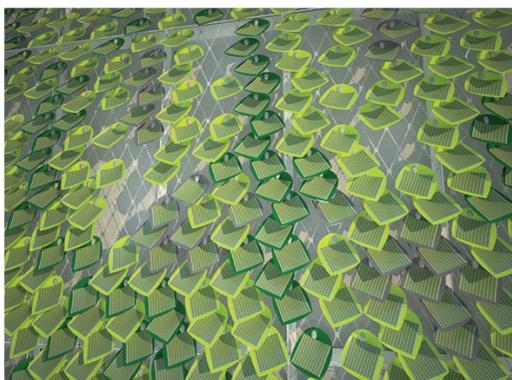
Highlights

SCIF had its largest request for funding to date this spring. There were 19 applicants totaling over \$240,000 for sustainable projects across campus.



We awarded our largest grant for the Honors Housing: Green Initiative. Jessica Batty, MBA and Masters of Architecture student will be leading the way for the U's first green residence. The room will be equipped with energy-saving devices, sustainably sourced furniture and real-time energy meters. Page 20.

We created the green TITAN award as part of the tech TITAN competition, to award innovative students for green ideas in the areas of business and technology. Page 6.

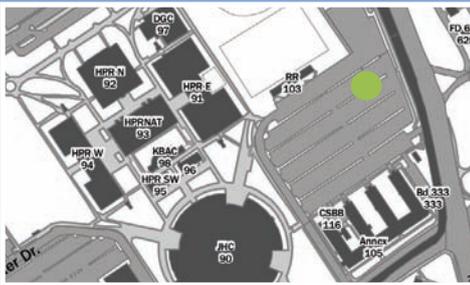


The University of Utah will be the first campus in the country to install *Solar Ivy*. The new solar panel technology is brought to the U through the initiative of Environmental Studies student Tom Melbum. Page 15.

Experience

Honors Housing: Green Innovation Initiative

Establishing an exhibition piece for sustainable campus living



Location: Donna Garff Marriott Honors Residential Scholars Community



Project Executives

Jessica Batty, Masters of Architecture and Business Administration Candidate

Project Advisor

Jörg Rügemeier, Professor, College of Architecture

Community Partners



"The project goal will be to generate awareness and to educate occupants and visitors on the impact of user behaviors in responsible energy use and reduction."

-Jessica Batty, Project Executive

Project Overview

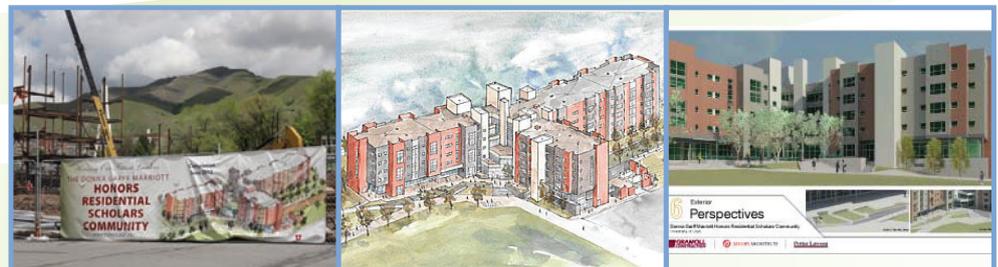
Jessica Batty, Project Executive, designed the first green residential space on campus. The demonstration apartment, located in the Honors House, will be painted with zero VOC paints and flooring finishes, furnished with sustainably-produced furniture and a retractable clothes-line. It will also have LED lighting and a water monitor in the shower. A Dashboard Energy Monitoring system will be installed, that allows in real-time, residents to visually understand the energy consumption resulting of their particular lifestyle. The same system will be installed in several other apartments in the house so that residents may compete in terms of which units can get the lowest energy consumption.

Impact

The demonstration and the monitoring system provide great potential for education and outreach, open houses, and comparative research studies as well as provide significant reductions in water and energy use.

Budget

\$70,000 went towards all of the aforementioned enhancements to the Honors Housing residence.



RecycBike

Supporting student volunteers' recycling efforts at campus events

"The main objective of the project is to support President Young's 2008 signing of the American College and University Presidents Climate Commitment by reducing the amount of waste materials left after events at Rice Eccles Stadium"

-Derk Harris, Project Executive

Project Overview

Derk Harris started this project as a way "to get students out on bicycles educating others about the importance of reducing waste." By recycling students can help reduce the nearly 8 tons of trash produced at each football game. Volunteers with the student-led Recycle Rice-Eccles initiative will now be manned with bicycles to easily collect the recyclable goods at tailgating events.

Impact

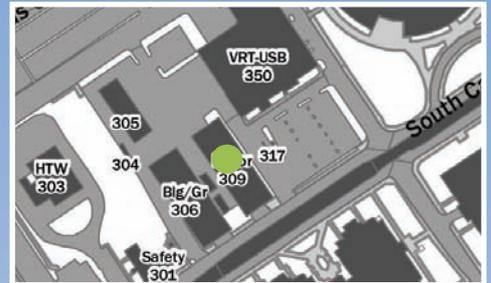
Derk developed a waste-reduction program that will be utilized year-round. These bikes will help raise awareness about the recycling facilities and empower the student volunteers. The reduction in waste will also decrease the stadium waste-disposal fee.

Budget

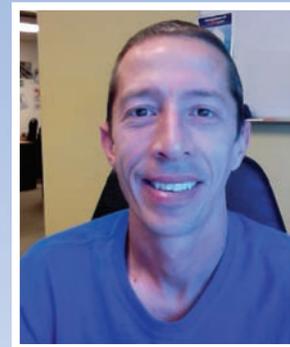
\$4,200 went towards five Madsen Cycles.



Experience



Location: Motorpool



Project Executives

Derk Harris, Senior in Environmental Studies

Project Advisor

Stephen Goldsmith, Professor, City and Metropolitan Planning

Community Partners

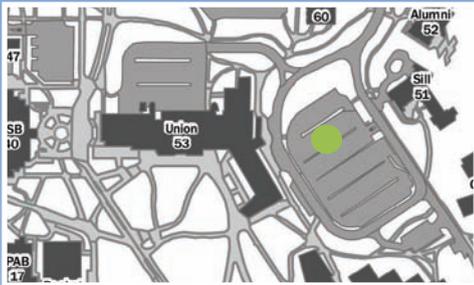


ROBERT J. DEBRY & ASSOCIATES

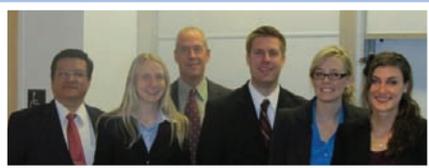
Experience

Solar Parking

Are U of U commuters willing to pay more to park under solar panels?



Location: Campus-wide



Project Executives

Solar Parking Team of MBA students:
Hannah Bybee, Jared Durrant, Amber McNeel, Robert Millsap, Robinson Vasquez, Erica Wiley

Project Advisor

Rick Lake, Chief Financial Officer, David Eccles School of Business

Community Partners



“Great idea to have covered parking with solar panels! A solar covered spot closer to work would be worth the extra money”

-Survey Respondent

Project Overview

This unique project was an investigation of financial analysis, environmental benefit and marketing strategies for Solar Panels in University parking lots. A team of six MBA students, as part of their Field Study program, conducted this semester long study. They worked with Commuter Services to distribute a campus-wide survey asking the University of Utah community if they were willing to pay an extra premium for a green parking pass. This pass, in theory, would provide shade in the summer and snow protection in the winter, all the while producing electricity for the campus. Along with the survey, the team looked into the energy production, cost, and environmental benefit of a solar panel array. This project was the first sustainability-focused Field Study and its success has shown the need for more studies like this in the future.

Impact

One of the most interesting conclusions of their study was that 60% of the 4,500 survey respondents were willing to pay over \$50 more annually for a green parking pass. The team strongly recommended that the University of Utah consider installing an array that would cover 20-40 highly visible parking spots. This positive response has paved the way for Masters of Science and Technology student Peter Nelson, who will be using this study as the precursor to his Fall 2011 master’s project, The Implementation of Solar Parking at the University of Utah.

Budget

\$5,000 sponsored this study.



University Student Apartments Recycling

Making recycling easier for students

"The goal is to substantially reduce trash and increase recycling by providing them [students] with a convenient means to recycle"

-Sarah Acree, Project Executive

Project Overview

The University Student Apartments are a leader in sustainability with a thriving community garden and a new recycling program. The program, led by Sarah and Sterling Acree, provides bins to each resident to make it easier to sort and carry recycled goods to the recycling dumpsters. During the summer of 2011, resident advisors distributed over 1,000 bins. They decided to make it an opt-in program to ensure that those with bins would use them. Before a student receives a bin, they learn about the acceptable materials for recycling.

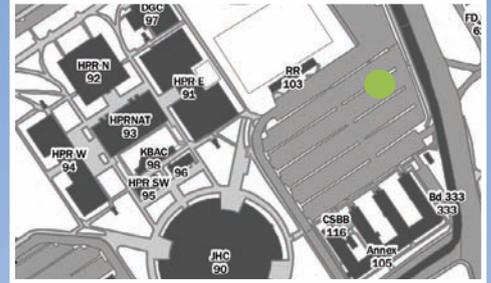
Impact

Within the first month of the new program, the recycling dumpsters were at capacity with minimal contamination. The recycling program aims to increase recycling rates by 40% over the next year.

Budget

\$5,000 was used to purchase 7-gallon individual recycling bins.

Experience



Location: University Student Apartments



Project Executives

Sarah and Sterling Acree, Graduate Student in Business Administration

Project Advisor

Valerie Green, Manager of Residential Life at University Student Apartments

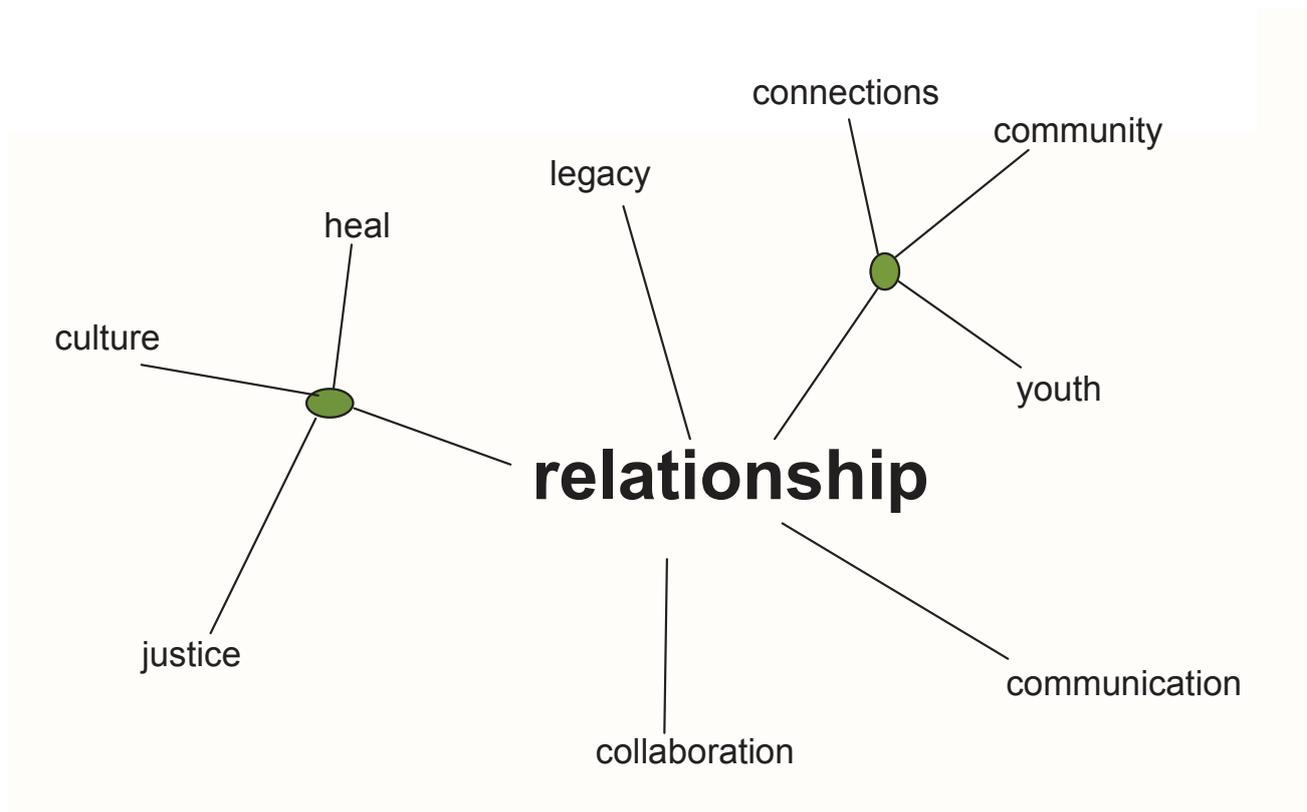
Community Partners

UNIVERSITY STUDENT APARTMENTS
THE UNIVERSITY OF UTAH



Relationship

re•la•tion•ship — *n* a connection, association, or involvement

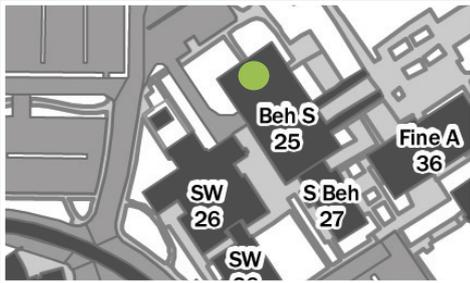


Students are developing relationships with faculty and staff, building ties between departments and into the larger community.

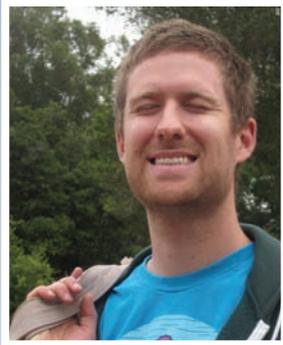
Relationship

Campus Hydration Stations

Creating an infrastructure for reusable water bottles on campus



Location: OSH, Field House and Psychology Building



Project Executives

Blair Furmanski, Senior in Psychology

Project Advisor

Karren Nichols, Sustainability Coordinator, Marriott Library

“The stations will create an environment where the use of reusable water bottles is accepted, encouraged and convenient.”

-Blair Furmanski, Project Executive

Project Overview

Based on his experience working with the Lights Out project, Blair was inspired to take on his own SCIF project. He connected with Karren Nichols at the Marriott Library and decided to address the frustrating problem of refilling reusable water bottles. Refilling at traditional faucets and water fountains is often a tedious and messy process. Recognizing that this was a barrier to people choosing the sustainable behavior of re-filling their own water bottle, Blair decided to bring the hydration stations to the Field House.

Impact

Plastic water bottles have a one-time use, take energy to make and even more energy and water to clean and recycle them. This project will save energy, water, and reduce waste. The use of the stations will be tracked in order to help quantify impact.

Budget

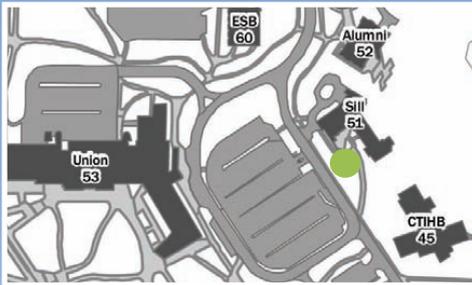
\$5,600 went towards two stations.



Relationship

Campus Edible Garden Supplies

Making it easier to grow and transport food



Location: Pioneer and Sill Center Gardens



Project Executives

Alexandra Parvaz, M.S., Campus Garden Coordinator

Project Advisor

Jen Colby, Coordinator, Office of Sustainability

Community Partners



“The purpose of the Campus Edible Gardens Project is to help enhance the availability of organically grown food on campus.”

-Alexandra Parvaz, Project Executive

Project Overview

Volunteers have spent over 500 hours working in the gardens since the fall of 2010. With so much activity transporting produce and materials has become a significant challenge to the garden and volunteers. This grant addresses this problem reducing the gap between budget and student involvement. The gardens volunteers can now use the new customized bike trailers to transport food to the campus kitchens and U of U Farmers' Market whereas before they often used their own vehicles. Along with the bike trailers, the grant includes funds for a tool storage facility. The secure storage space will ensure that the garden supplies remain part of the gardens for years to come.

Impact

The Campus Edible Gardens produce over 600 pounds of organic food a year. The food is a main feature at the University Farmers' Market which fosters community on campus. The produce is also purchased by Chartwells to be used in the on-campus dining facilities.

Budget

\$3,500 was used to build the custom bike trailers and storage facility.



Skate Stations

Field house supports alternative transportation

*"This project will promote alternative transportation to campus."
-Cheri Jenkins, Project Advisor*

Project Overview

The objective of the skate station project is to give students a secure place to lock their skateboards while they are using the Field House or walking around campus.

Impact

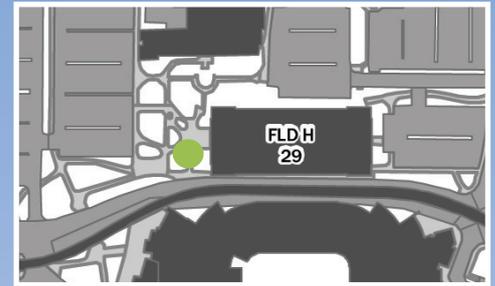
Skateboard and long board use is common on campus, even during the snowy winter months. Providing a secure place to store the boards will reduce the number of thefts and damage to the building and encourage more people to consider a fun and environmentally friendly mode of transportation. The Field House employees will track the use of the skate stations and if they find a high demand for the station more could be installed around campus.

Budget

\$1,400 went towards the new skate station.



Relationship



Location: West of the Field House entrance



Project Executives

Chavalah Washington, Senior in Health Promotion and Education

Project Advisor

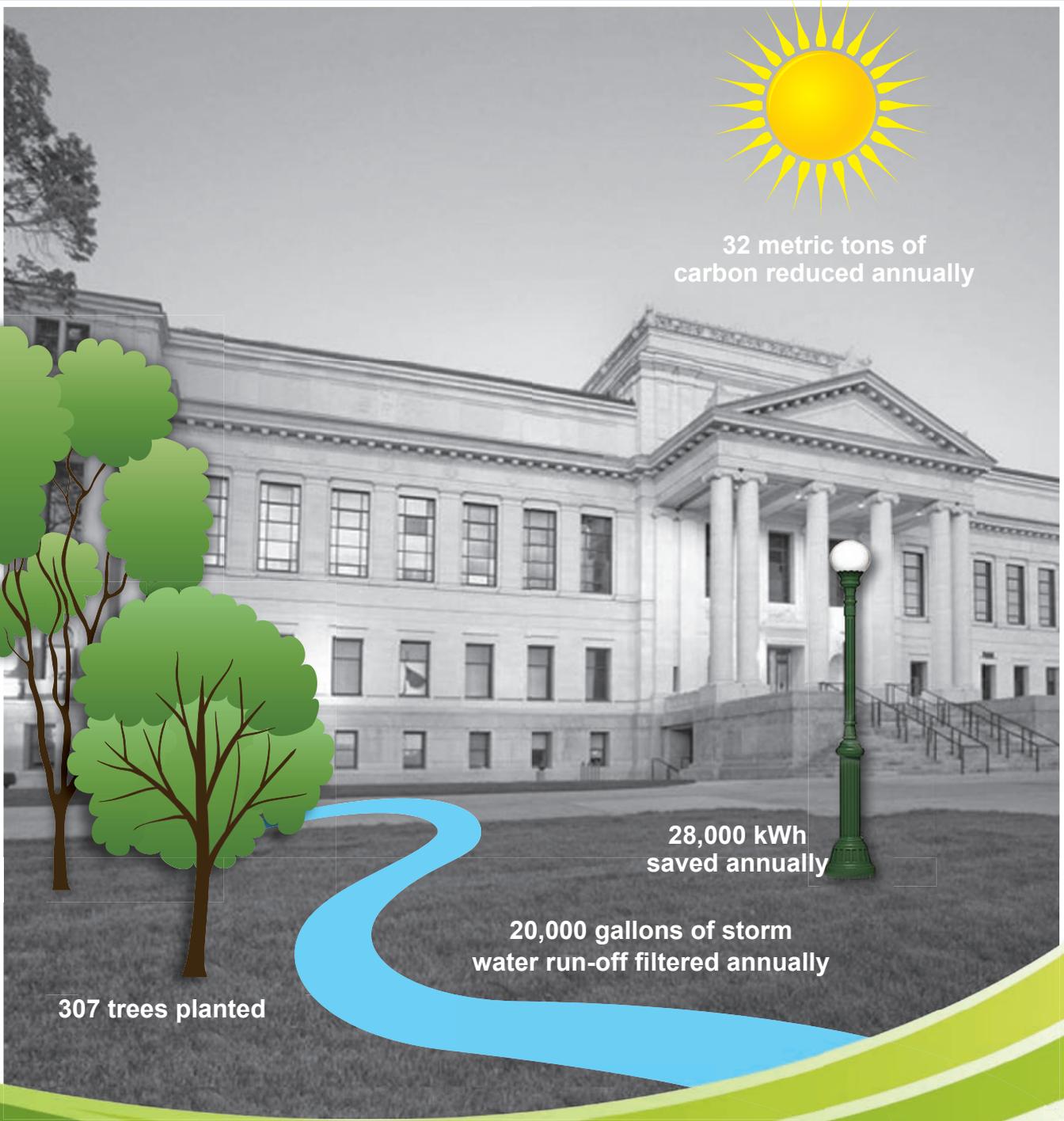
Cheri Jenkins, Associate Director of Campus Recreation Services

Community Partners



Impact

SCIF projects aid the University in reaching the goals set out in the Climate Action Plan 2010 to become a water and carbon neutral campus by 2050.

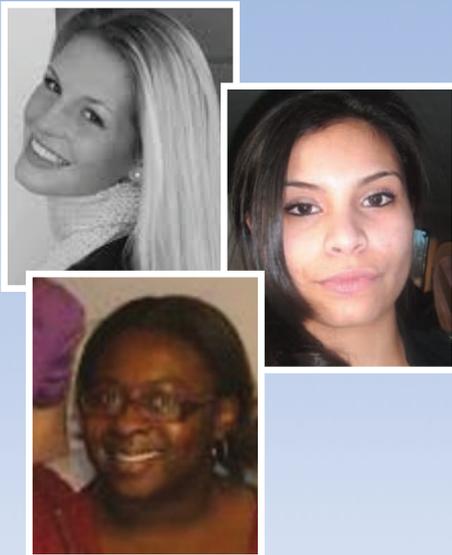


Relationship

Huntsman Cancer Institute Wellness Garden Helping to build a more patient-centered atmosphere



Location: Huntsman Cancer Institute, Research Park



Project Executives

Bryn McNerny, Sophomore in Biology
Sara Torres, Sophomore in Psychology
Tope Adeyemi, Senior in Psychology

Project Advisor

Jim Agutter, Professor, College of Architecture and Honors College

“We have discovered that evidence-based research shows the environment plays an important role in defining the patient experience.”

-Wellness Team

Project Overview

The Honors College Think Tank, “Improving the Patient Experience” created an environment where students learned about the issues surrounding long-term hospital stays, and challenged the students to come up with creative solutions. Undergraduate students Bryn McNerny, Sara Torres, and Tope Adeyemi’s solution was to create a Wellness Garden at the Huntsman Cancer Institute (HCI). Their garden will serve as a place for patients to spend time outside and connect to the natural environment which have been proven to aid the well-being of patients, staff, and visitors. The Huntsman Cancer Institute was thrilled with this idea and the students have created a strong partnership with HCI to ensure that the program will continue even after the students graduate.

Impact

The Huntsman Wellness Garden will produce healthier food that will be used on-site, thus lowering the carbon “food” print of the HCI and will increase the overall effectiveness in helping patients to recover from cancer.

Budget

\$5,400 was used for garden beds, seeds and shovels to build the garden.



Social Justice Gardens Curriculum

Supporting experiential learning through University and Elementary School partnerships

“Social Justice Gardens allow students to take an active role in the community around them.”

-Ashley Edgette, Project Executive

Project Overview

The Social Justice Gardens (SJG) were founded by students to share the “values of empowerment and protection for all individuals on the basis of health, equality and environmental improvement.” The gardens have been thriving at Mountain View Elementary School, providing a garden plot to 15 families and a large plot for the school. 2011 marks the second year of the SJG where the focus of is moving from garden construction to education. This grant will help the University students develop a strong curriculum component for the gardens to ensure the longevity of the program.

Impact

Over 100 University of Utah students volunteer with the Social Justice Gardens annually. The gardens provide a place for hands-on experience in urban agriculture and elementary education while providing a connection to the off-campus community.

Budget

\$1,000 was used for educational materials such as journals, art supplies and equipment for scientific experiments.

Relationship



Location: Mountain View Elementary School



Project Executives

Ashley Edgette, Sophomore in Political Science and Environmental Studies

Project Advisor

Nick Rothacher, Student Programs Coordinator, Bennion Center

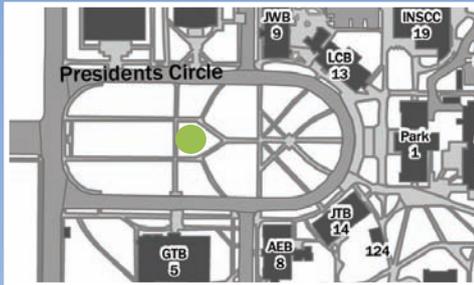
Community Partners



Relationship

Zero Waste Lunch Campaign at Club U

Encouraging sustainable behavior among the campers



Location: President's Circle



Project Executives

Laurie Browne, Graduate Research Assistant, Department of Parks, Recreation and Tourism

Project Advisor

Nate Friedman, Program Manager, Youth Education

Community Partners



"Our first aim is to foster a sense of environmental responsibility by teaching children how to pack and dispose of their lunch materials in such a way as to minimize their waste"

-Laurie Browne, Project Executive

Project Overview

This project will provide reusable lunch bags to youth ages 6-13 in the University of Utah summer camp program, Club U. The campaign brings the U's culture of sustainability into the lives of Salt Lake Valley residents. Project Executive Laurie Browne designed educational materials to help parents pack more environmentally conscious lunches and will be measuring the effectiveness of the outreach materials.

Impact

The Club U Summer Program has nearly 1,300 participants. University students and camp counselors will also supervise composting and recycling efforts during lunch time. Club U will compare the pounds of waste produced from 2010 to 2011 to quantify the success of the campaign.

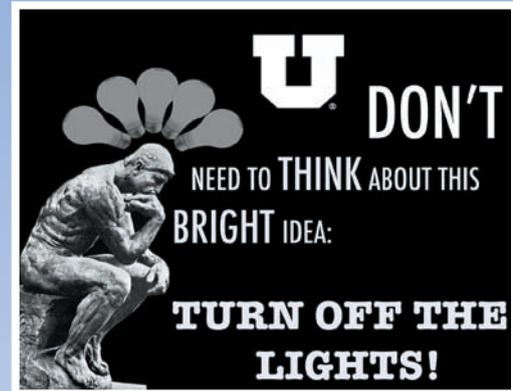
Budget

\$4,000 went towards lunch bags and educational material for the campaign.



Updates

The Lights Out! Project supported six undergraduate research assistants to investigate the most effective way to convey the “turn the lights off” message. The information from this study was used to inform Blair Furmanski’s senior thesis, “Comparing Two Methods for Conserving Electricity at the University of Utah” which he presented at a national sustainability conference, the Association for the Advancement of Sustainability in Higher Education (AASHE).



The first campus rain garden was built in April 2010 and continues to be a successful model for storm-water filtration on campus.

Julie Henry, project executive for the Union Plaza Pilot Study, worked to determine the most efficient option for outdoor campus lighting. Local electric firms that were so impressed with her project idea they supplied the lights for the study.

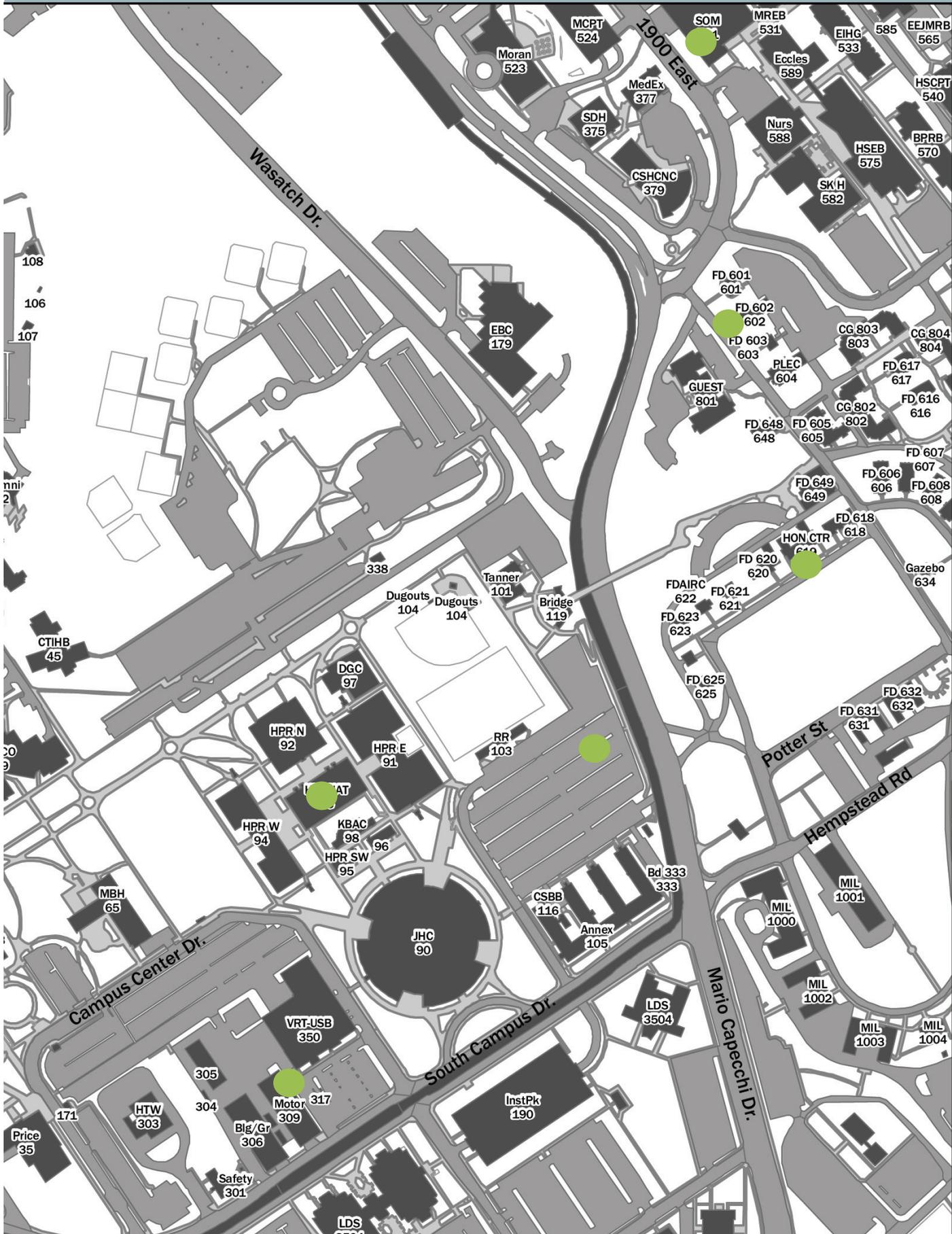


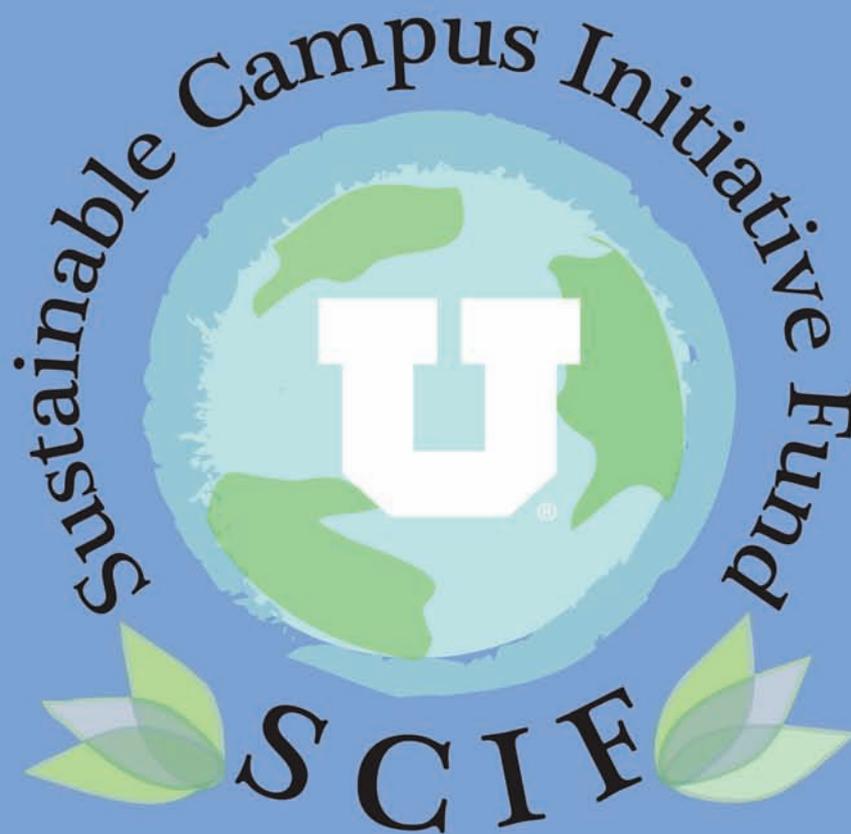
For more information about these projects, see the SCIF Annual Report 2009 - 2010 at www.sustainability.utah.edu/SCIF

2010-2011 Community Partners

- Associated Students of the University of Utah
- Campus Recreation Services
- Chartwells
- College of Social Work
- Commuter Services
- Crossroads Urban Center
- Department of Civil and Environmental Engineering
- Department of Mechanical Engineering
- Environmental Studies Program
- Facilities Management
- Honors College
- Housing and Residential Education
- Huntsman Cancer Institute
- J. Willard Marriott Library
- Lowell Bennion Community Service Center
- Madsen Cycles
- Motorpool
- Office of Sustainability
- Robert J. Debry
- Sustainability Research Center
- Utahns Against Hunger
- University Bike Collective
- University Student Apartments

Map Of SCIF Projects





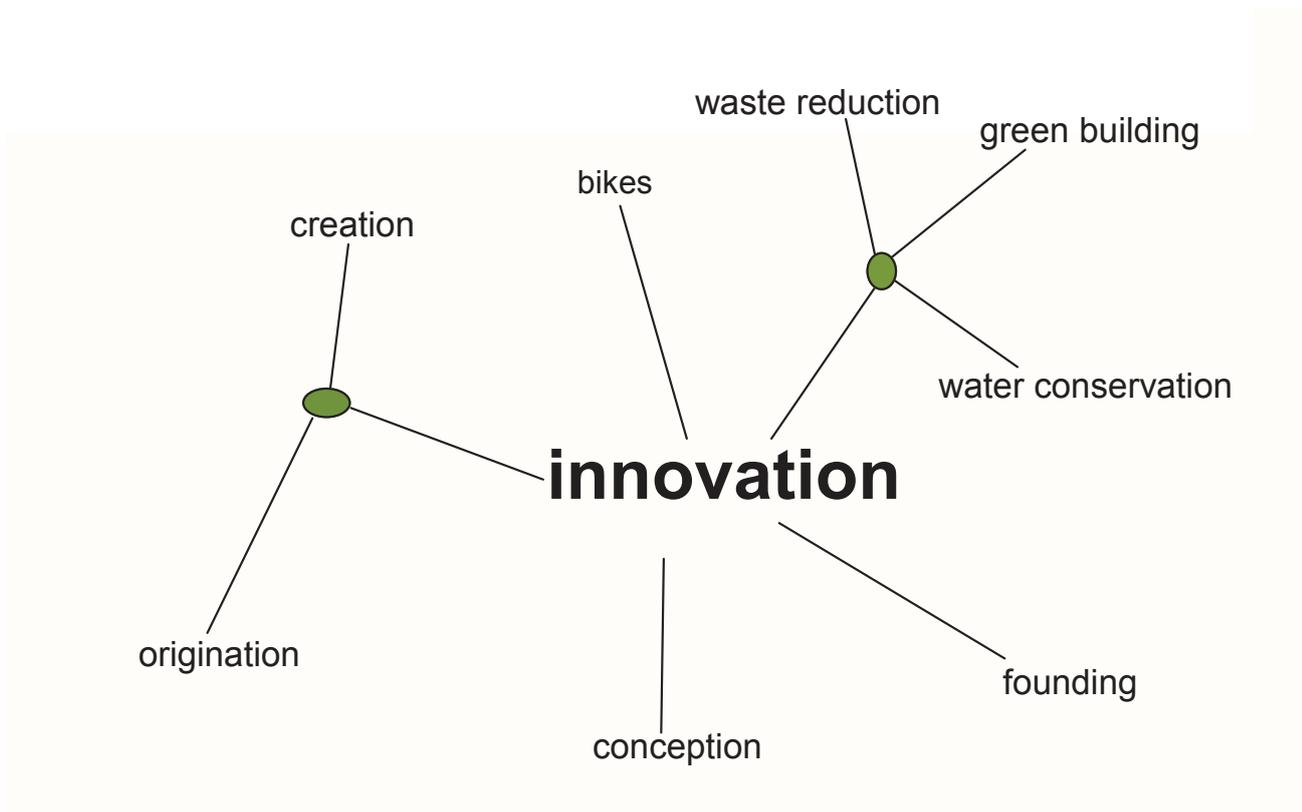
Office of Sustainability • 1901 E. South Campus Dr. Annex Room 1024, Salt Lake City, Utah 84112 • 801-581-7510

Available electronically at www.sustainability.utah.edu/SCIF

Cover printed on 25% post consumer recycled paper. Inside pages printed on 100% post consumer recycled paper.

Innovation

in•no•va•tion — *n* something newly introduced, such as a new method or device



Students are innovating by creating new ways of doing things on campus and by bringing back proven technologies that have been forgotten.



By teaming with **techTITANS**, out of Pierre Lassonde Entrepreneur Center, we awarded innovative students for green ideas. The purpose of the **greenTITANS** Award is to recognize environmentally-conscious technology and business ideas. Our first year produced proposals that have the potential to significantly impact sustainability actions and thought on campus and beyond.

First place (\$500) was awarded to the “SEED team,” (Matt Swindell, Justin Iwasaki, Chris Talvy, Hunter Gundersen), for their four-unit sustainable home design. The homes will be built by repurposing make-shift home materials combined with other sustainably-sourced local materials to create an affordable living community for middle-income families in Tanzania.



2nd Place (\$300): Foster's Five a Day, an organic farm helping underserved youth.

3rd Place (\$200): Bamboo Athletic wear, outfitting athletes with renewable fibers.

Partners



Air Me Up

A simple solution for saving water in campus faucets

"My objective is to reduce the amount of water used in the Hyper Complex buildings. This objective is one small step towards helping the University of Utah achieve its goal of being a water neutral campus by 2050."

-Andy Brown, Project Executive

Project Overview

While training for a triathlon in the Hyper complex, Andy Brown was thinking about more than his health. He was concerned about the amount of water being used. After a little research, Andy discovered that the shower heads were already high efficiency but that the sink faucets were wasteful compared to newer ones on campus. He added a simple device, an aerator, that could be easily screwed on to the faucet to save water.

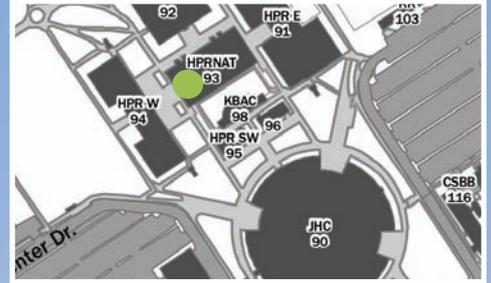
Impact

120 aerators will be installed, leading to a 40% reduction in the amount of water used per minute.

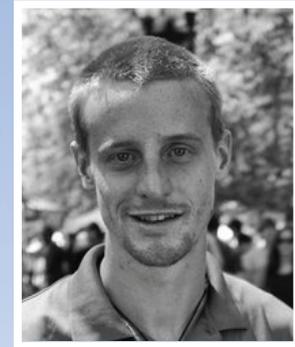
Budget

\$1,000 went towards the aerators.

Innovation



Location: Hyper complex and Huntsman Center



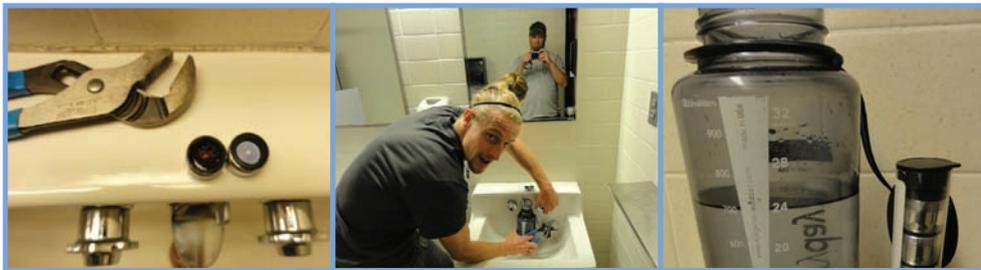
Project Executives

Andy Brown, Senior in French and Environmental Studies

Project Advisors

Dan McCool, Professor and Director of Environmental Studies Program

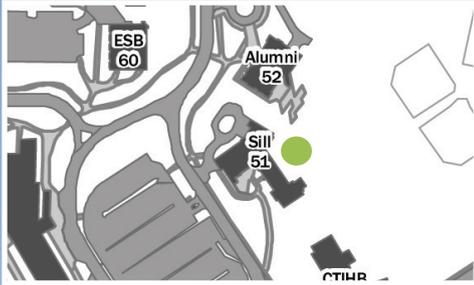
Jim Staples, Campus Plumbing Supervisor



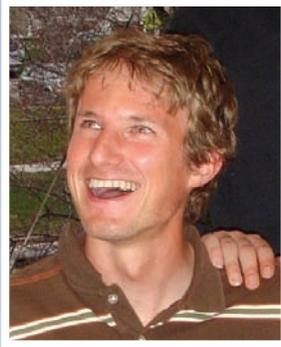
Innovation

Ice Ball Cooling System

Measuring the effectiveness of the first campus
Thermosiphon Array



Location: East of the Sill
Center Building



Project Executives

Kevin Smith, Ph. D candidate in
Mechanical Engineering

Project Advisor

Dr. Kent Udell, Professor,
Mechanical Engineering
Director, Sustainability
Research Center

Community Partners



“This demonstration is the first known application of the use of seasonal energy or cooling application.”

-Kevin Smith, Project Executive

Project Overview

The idea behind Dr. Kent Udell’s “ice ball” project is to use the cold temperatures from winter to cool buildings in the summer. The winter cold will be stored in 19 tubes drilled 50 feet in the ground behind the Sill Center. With the ice from winter, the cold air produced will be pumped into the Sill Centers air ventilation system during the summer. Project Executive Kevin Smith will be able to test the system’s temperature and air flow for efficiency.

Impact

The use of this technology would directly decrease the amount of fossil fuel sourced energy currently used for air conditioning on campus. As Kevin Smith said, “This energy is free. The ground is the perfect medium. It’s well insulated. We are just moving energy, instead of a conventional heating ventilation air conditioning system.” Currently, air conditioning is more than 5% of the University’s total energy load, so every future ice ball project would help lower the demand for electricity.

Budget

\$6,000 was used for the monitoring equipment such as the flow sensors.



Rain Garden Optimization

Measuring the effectiveness of the first rain garden on the University of Utah campus

“To the best of our knowledge, this is the first bio-retention garden designed to treat runoff from parking lots in Utah.”

-Dasch Houdeshel, Project Executive

Project Overview

Last year, Thomas Walsh and Dasch Houdeshel, built the first campus rain garden. Their Civil and Environmental Engineering background enabled them to design and build the garden to capture and filter storm water run-off. This year, they will transform the gardens into a living laboratory by installing a network of soil moisture sensors. Dasch will oversee a team of graduate students who will work to answer three key research questions: how well is the storm water collection system is functioning, where is the water going, and is the current design enabling proper filtration and flow? Their research will create a design template for future rain gardens around campus and throughout the state of Utah.

Impact

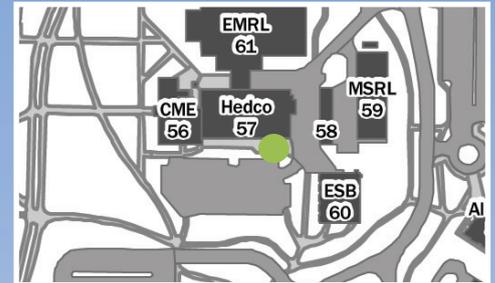
The University of Utah pays over \$220,000 annually in storm water fees. If implemented across campus, bio-retention gardens would lower the University’s storm water bill and help the University reach its goal of being a water-neutral campus. Reducing storm water runoff also helps maintain the groundwater cycle and prevents the pollution of natural water ways.

Budget

\$19,000 went towards the soil-moisture measuring network.



Innovation



Location: First campus rain garden, just south of the HEDCO building.



Project Executives

Dasch Houdeshel, PhD candidate in Water Resources Engineering

Project Advisor

Dr. Christine Pomeroy, Assistant Professor, Civil and Environmental Engineering

Community Partners

Department of
CIVIL & ENVIRONMENTAL ENGINEERING
THE UNIVERSITY OF UTAH