Green Teams Summit
May 23, 2012
11:00-1:00p

Campus Green Teams
Pilot Project 2011-2012

Location & Streaming Hosted by the
J. Willard Marriott Library
Campus Green Teams

- Biochemistry (2009)
- Business, David Eccles School of (2011)
- Continuing Education (2011)
- Eccles Health Science Library (2008)
- E-Technology Commercialization (2011)
- Human Resources (2011)
- Humanities, College of (2011)
- International Center (2011)
- Kennecott Building (2011)
- Marriott Library (2008)
- Parks Recreation & Tourism (2010)
- Red Butte Garden (2007)
- Sill Center (2008)
- Student Affairs (2009)
- Utah Museum of Natural History (2007)
- University Orthopedic Center (2010)
Assessing and increasing the effectiveness of their current recycling program

Education & Awareness

Battery Recycling
- Placed recycling quads on every floor of the three business buildings. This project was funded by SCIF.
- Completed an awareness campaign to encourage recycling and waste diversion from landfills in the business school.
Continuing Education

A LIFETIME OF LEARNING

- Implemented recycling for all recyclable materials in the Continuing Education kitchen.
- Encourages the use of reusable plates and utensils.

GreenLight: A WAY OF LIFE
- Long time leader in sustainability on campus
- Liaison with the three libraries
- Continues to look for green opportunities as they work through a building renovation
Working hard to increase recycling and use recyclable materials
Recently received approval to participate in the Campus Recycling program!

Plant Operations will soon begin picking up Office Pack, Mixed Paper, Aluminum, and Plastics from the HR building, located in Research Park.
- Received a SCIF grant to reduce energy consumption and increase lighting efficiency by installing light sensors in restrooms and hallways.
- Working towards increasing recycling quads in all the Humanities buildings.
- Researching how to install a water bottle filling station in the lobby of LNCO and CTIH.
All copy paper purchases include recycled content

Improved operational practices through the use of repurposed printing for in house print jobs and fax notifications

Introduced duplex printing for student files
Started a new Green Team!
Received approval April 2012 to form a new Green Team!
Switched to 30% post consumer recycled paper in all public printers and copiers

Looking for additional student internship opportunities

Working towards creating a Green Dashboard that would display real-time campus information such as building energy use statistics and other sustainability related information in the West Lobby of the Library
Level 1, Marriott Library Water Bottle Filling Station
- Fast
- Cold
- Filtered

Check the green ticker when you fill up to see how many water bottles you're helping to save from the landfill.

This project was funded by the Sustainable Campus Initiative Fund (SCIF)

Marriott Library Green Committee
Inspiring the creation, discovery, and use of knowledge
“I Had Arrived At Perfection: The Lost Canyons of the Green River”

by Roy Dale Webb

Tuesday, July 12
12 – 1 p.m. (bring your lunch!)
Marriott Library
Gould Auditorium

Roy Dale Webb was born in Farmington, New Mexico and grew up on the banks of the San Juan and Animas Rivers. Webb earned his bachelor’s and master’s degrees in American History from the University of Utah. He has worked at the University’s J. Willard Marriott Library since 1981; and since 1994, he has served as the Multimedia Archivist in Special Collections. The author of five books, Webb has been a historian/interpreter on river trips since 1983.
Received a Spring 2012 SCIF grant to install a water bottle filling station in the Annex Building.
- Increased recycling at Red Butte Concert Events
- Glass recycling
- Recycling program for used banners
- Working on a PDF project to convert PDF’s to “Text PDF’s” to improve search-ability
- Upcoming renovation project to replace old windows to conserve energy and prevent heat loss
- Completed a SCIF project in Spring 2010 to install light switches, motion sensors, and ambient light sensors to increase energy efficiencies

Seasonal Energy Storage for Carbon-Free Heating and Air Conditioning

A new technology that uses seasonal energy for building heating and cooling is being developed on campus. The idea is to chill soils in the winter to provide carbon-free air conditioning in the summer and eventually to store the heat of the summer in underground soils to provide carbon-free heat in the winter. Heat is inexpensively and effectively transferred to and from the soils with a patent-pending technology called Smart Thermosiphons.

The installation of a Smart Thermosiphon array at the Sill Center to demonstrate the use of chilled subsurface soils for carbon-free summer air conditioning is an example of an opportunity to reduce fossil fuel energy use through innovation and research. System performance monitoring and data analysis will be the thesis research of graduate students. The site will become an operating laboratory, allowing graduate and undergraduate engineering education opportunities for years to come.
Mark St. Andre, assistant dean of Undergraduate Studies, shows off the Sill Center’s new dashboard console, which displays the energy harvested daily from the sun from their rooftop solar photovoltaic (PV) array.

Project Executives
Drew Thompson, Undergraduate, Project Executive
Mark St. Andre, Assistant Dean Of Undergraduate Studies, Project Advisor

Sill Center Power Down
Project Profile

Saving energy by installing ambient and occupancy lighting sensors.

Project Overview
This project will reduce the Sill Center’s electrical power needs, while making the users of the building more aware of their energy consumption. The Sill Center Power Down will provide greater awareness of how electricity can be reduced, made more efficient or eliminated entirely. The lighting in the building’s conference room will install a light sensor to adjust the lighting based on the natural light that is available.

Location: Sterling Sill Center

Impact
The conference room that hosts approximately 200 meetings a year will turn from artificially generated light to natural light.

Budget
$10,000
The money funded motion and ambient lighting sensors as well as switches to turn off lights when not in use.

About SCIF
The Sustainable Campus Initiative Fund brings students’ sustainable ideas into fruition on the University of Utah campus.

Approved Spring 2010
- Completed and awarded numerous SCIF grants
  - Bike to the U in Fall 2011 to encourage bicycle commuting to and from campus
  - Social Soup in Fall 2011 to educate and encourage discussion on sustainable food issues
  - Lights Out project in Spring 2010 to research how to engage students in turning off lights in empty classrooms.
  - Water bottle filling station approved in Spring 2012 to encourage students to bring their own water bottles to campus.
Social Work Energy Save  Project Profile

Saving energy with lighting control upgrades.

Project Overview
This project will reduce the lighting load in the College of Social Work. The project aims to improve lighting efficiency, address the tendency for classroom lights to left on when not needed, and to take advantage of natural daylight when possible. This will be accomplished by replacing inefficient light bulbs, installing occupancy and daylight sensors.

Location: Social Work Building

Impact
The annual energy use will be reduced by 17,315kWh.

Budget
$6,000
The money will fund retrofitting lighting fixtures, as well as cost and installation of control sensors.

Community Partners
ROCKY MOUNTAIN POWER

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Office of Sustainability
The University of Utah
Lights Out  Project Profile

Not Your Typical Light Switch

- No need to turn it off!
- If the sun is shining or the room is empty, the lights will automatically go off.
- This will save over 17,000 kWh a year, the equivalent amount of energy used in 1.5 homes for one year.
- The switches will pay for themselves within 6 years.

Project Overview

The purpose of this project is to actively engage university students in turning off classroom lights in empty rooms. Research Assistants monitored classrooms of students that had and had not been given a presentation about turning off lights to save energy. The research will determine the best way to deliver the lights out message.

Location: Orson Spencer Hall, Social Behavior Science Building and Social Work Building

Impact

If all classrooms turn off lights for an additional 3 hours a day, the University will save over $120,000 per year in energy consumption. This project also aims to impact all students to keep lights off in empty rooms.

Budget

$3,300

Funds paid for undergraduate research assistants to observe classrooms twice daily and enter the data for analyses, as well as, basic supplies for presentations and signs.

Community Partners

College of SOCIAL AND BEHAVIORAL SCIENCE
THE UNIVERSITY OF UTAH

About SCIF

The Sustainable Campus Initiative Fund brings students' sustainable ideas into fruition on the University of Utah campus.

www.sustainability.utah.edu/SCIF  801-581-7510

Approved Spring 2010

OFFICE OF SUSTAINABILITY
THE UNIVERSITY OF UTAH
SASC Paper Project 2011

Student Affairs initiative to reduce the overall consumption of paper – both recycled and non-recycled

Based on President Young’s Initiative
“We are reaching that delicate balance between environmental care, economic development, and social responsibility by introducing and expanding programs...”

How Much Are We Spending?

Benefits
- Saving Money
- Online forms increase efficiency and access for all users
- Easy to modify and avoid mistakes
- Find information & documents quickly with search functions
- Students want to communicate on
- More space for people not paper
- Save trees!
- Other ideas?

Tips to Reduce Your Paper Usage
- Use smaller margins
- Print on both sides
- Use a smaller font
- Print multiple pages per sheet
- Reusing paper – printing on the back
- Recycle the paper you do use!
Spent the last year working with departments in the Annex building to form a centralized green team.

Provided valuable information on how to support green initiatives in older buildings that house a large number of departments.

For the Annex building it was determined individual department actions would have the greatest impact.
Recently started using a program called “PaperCut” that requires each employee to login and logout in order to release printed documents.

Program tracks how much paper is used by each employee.

Within a week of using the system documents left in the copy room were practically eliminated.
University Orthopedic Center

- Switched to post-consumer recycled paper
- Designated a printer drawer to repurposed paper for in-house print jobs
- Will begin moving to a paperless system this summer
- Received a Spring 2012 SCIF grant to retrofit the parking lot lighting
UNIQUE CHALLENGE & SUCCESS

Annex Building
• Old building
• Weak infrastructure
• Future uncertain, likely to be torn down

Residents
• Around 23 departments reside in the Annex Building
• Department size varies greatly
• Mix of administration, academic programs, and operations.

Success
• Expanded our knowledge of green team development.
• Each building has its own solution.
• Identifying a specific project for cross-departmental collaboration increases success rate.
• In the Annex, individual department actions have greatest impact.
### SUSTAINABILITY: MANY BENEFITS

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<th>Academics &amp; Learning</th>
<th>Operational Impacts</th>
<th>Stakeholder Impacts</th>
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*Slide courtesy of Dave Newport, Director Environmental Center University of Colorado at Boulder*
How does sustainability add value?

**Curricular & Co-curricular Education**
- Increases campus intellectual/social capital & relevance
- Enhances student & faculty recruitment, engagement & retention
- **Student learning**: interdisciplinary, project-based, critical-thinking skills

**Marketing & Branding**
- Improves student recruitment
- Enhances community support
- Increases development/fundraising potential

**Efficiency, Cost Control & Full Cost Evaluation**
- Resource conservation & waste reduction decreases costs
- Staff engaged, motivated and innovative
- **Improves “systems-thinking” approach**: decreases barriers to action

**Strategic Mapping, Planning, Inclusive Goal Setting, & Commitment**
- **Improves campus intelligence**: more informed decisions
- Inclusion informs of risks and downsides – allows hedging
- Improved town/gown relations
SUSTAINABILITY IS CORE VALUE (NOT PROGRAM)
SUSTAINABILITY DRIVES CAMPUS OUTCOMES