SCIF

Sustainable Campus Initiative Fund

ANNUAL REPORT

FALL 2013—SPRING 2014

SUSTAINABILITY
THE UNIVERSITY OF UTAH

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SUSTAINABLE CAMPUS INITIATIVE FUND (SCIF)

The Sustainable Campus Initiative Fund (SCIF), oversees competitive grants for student projects focused on sustainability education, environmental issues, 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. University of Utah students voted overwhelmingly in favor of the student driven campaign to pay $2.50 of their tuition each semester into SCIF. Since the program's inception in January 2010, SCIF has funded 165 innovative projects.

SCIF

Sustainable Campus Initiative Fund

COMMITTEE MEMBERS AND STAFF

SCIF COMMITTEE MEMBERS:

Maria Blevins
Ph.D. Candidate
Communication

Peter Timmons
Academic Space Planner
Space Planning & Management

Craig Bohn
Associate Director
Plant Operations

James Griner
Network Administrator
Undergraduate Studies

John Robinson
Graduate Student
Law School

Allison Boyer
Undergraduate Student
Environmental Geosciences;
Environmental & Sustainability Studies

Molly Wheeler
Senate Chair
Associated Students of the University of Utah

Chris Anderson
Undergraduate Student
Civil Engineering

Eric Pardyjack
Ph.D .Professor
Mechanical Engineering

Samantha Jackson
Phlebotomist
Dermatology

SUSTAINABILITY OFFICE:

Myron Willson
Director
Sustainability Office

Rachel Sanders
SCIF Coordinator (2013-2015)
Sustainable Campus Initiative Fund

Emerson Andrews
SCIF Coordinator
Sustainable Campus Initiative Fund

SUSTAINABILITY OFFICE
University of Utah
Business Classroom Building
1625 Campus Center Drive, Room 50
Salt Lake City, UT 84112
801-585-9352
emerson.andrews@utah.edu

Community Impact

>19,000 lbs recyclables diverted from the landfill

648 metric tons of CO_2 reduced every year

>940,000 Kwh saved per year

Emissions Equivalencies

73,000 gallons of gasoline

1,600 barrels of oil

Emissions from **80** homes

SCIF Statistics

Total funding awarded to date: **$505,000**

Total Projects to date: **165**

Total Student Volunteers: **156**

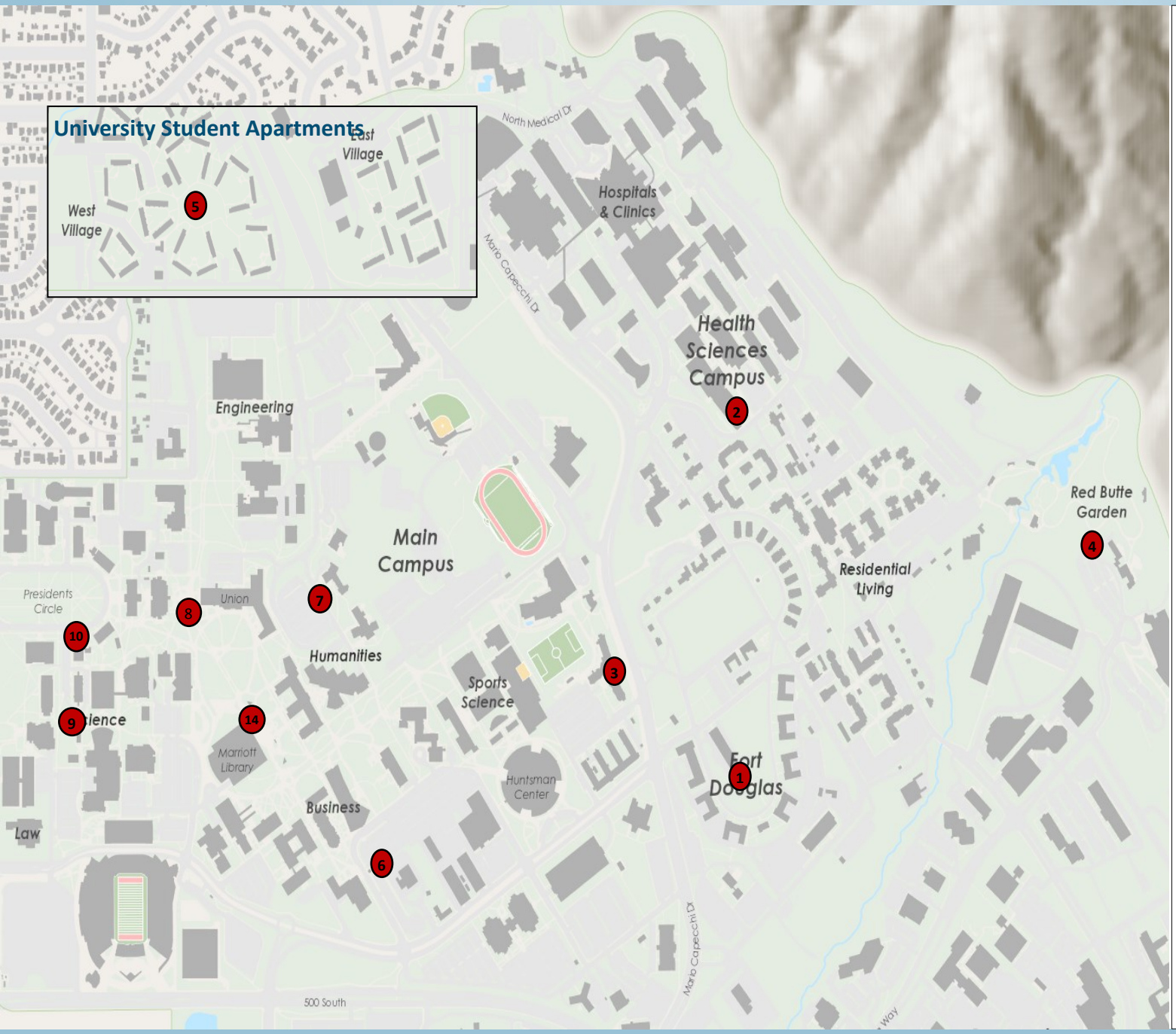
Total Students Impacted: **2,151**

Largest grant awarded: **$21,225**

Smallest grant awarded: **$1,980**

Average grant size: **$11,700**

PROJECT LOCATIONS



*Not Located on Main Campus Map
**Located Campus Wide

SCIF

Fort Douglas Light Pollution Reduction

The Fort Douglas Light Pollution Reduction Project was an effort to decrease light pollution and to increase energy efficiency within Fort Douglas housing area. While the original lights met the historic district design standards, they were inefficient and emitted significant light pollution. The consequences of light pollution are increasingly negative in terms of impact on human and animal health and behavior. In fact, lights at Fort Douglas were right outside of student housing and forced some occupants to black out their windows. Fortunately, this project purchased and installed five full-cutoff LED light posts that lowered energy costs, reduced light pollution, and maintained current historic district design standards.

Impact

- Replaced 5 high light-polluting fixtures
- Approximately 700 students benefit from the reduced light pollution
- Reduces energy consumption by 2810 kWh per year

Project Advisors

Stephen Goldsmith, City & Metropolitan Planning
Bill Leach , Facilities Management

Budget

$10,065.00

Location

Fort Douglas Housing

Partnership

Facilities Management,
Department of City & Metropolitan Planning

Project Executive:

Bettymaya Foott
Environmental and Sustainability Studies

FALL 2013

Huntsman Cancer Institute Gardens

The Huntsman Cancer Institute (HCI) Gardens was funded by a SCIF grant in an effort to bring gardening activities to Huntsman Cancer Institute patients. Raised beds were built to allow patients in wheelchairs to comfortably access the plots. The gardens have increased in popularity over the past year. The project executive is a founding member of an ever-growing group of faculty, staff, and students who have formed the HCI Garden Club. The club is working to provide webcasts, cooking demonstrations, and other programs based around plants grown in the garden. The programs are accessible by patients of varying levels of mobility. The club continues to establish relationships with additional gardening groups including Wasatch Community Gardens and Red Butte Gardens, which have donated plants in the past years.

Impact

- All 100 patients have access to the gardens at any given time
- Installed 7 raised garden boxes at the Huntsman Cancer Institute

Project Advisor

Annie Budhathoki, Acupuncturist
Wellness Center

Budget

$1,980.00

Location

Huntsman Cancer Institute

Partnership

Huntsman Cancer Institute, Red Butte Gardens, Wasatch Community Gardens

Project Executive:

Brooke Kirk
Business Systems Analyst

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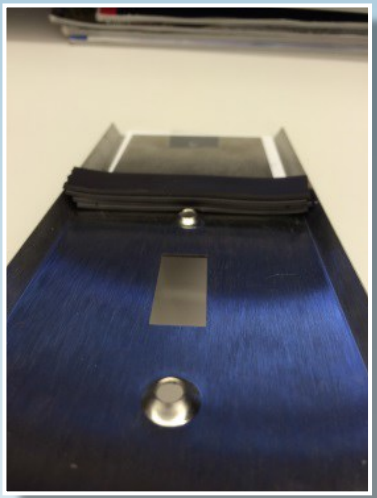

Impact Images

Impact Images was a pilot project designed to influence energy and water usage within the Honors Dormitory. A group of artists planned on affecting behavior through the use of strategically placed images near switches, plugs, and faucets. The student artist community, led by Eric Birkin and Jai Hamid Bashir, designed original pieces of art for production and installation within the main areas of the dorm to achieve their goals. Unfortunately, the original design of the switch attachments did not meet code requirements, and the project executives were encouraged to find a new solution. With the help of Dr. Amanda Smith in the Mechanical Engineering department, Jai and Eric found a solution and produced a project that was both aesthetically powerful and structurally sound.

Impact

- Helped reduce energy consumption in the Honors Dorm
- 309 students directly impacted

Project Advisor

Stephen Goldsmith, Associate Professor
Department of City & Metropolitan Planning

Budget

$5,771.95

Location

Honors Housing

Partnership

University Honors Housing, City & Metropolitan Planning, Mechanical Engineering

Project Executive:

Eric Birkin, Jai Hamid Bashir
Fine Arts/Urban Planning, Environmental and Sustainability Studies

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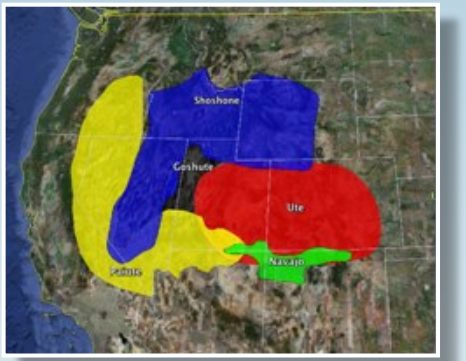

Native Voices (The Native Waters of Red Butte Creek)

Native Voices focused on utilizing Utah's tribal communities' historical knowledge of Red Butte Creek as a way to better understand the long-term regional values and the necessary stewardship of this great local resource. Despite the long-term affiliation with the Ute community, the University understands little about the history, current status, and future of Ute people. The goals of the research project were to correct misconceptions as well as describe Ute culture and history from the perspective of Ute people. This project identified sources of Tradition Ecological Knowledge (TEK) that are available for use in future research. Subsequently, tribal representatives were invited to a panel discussion, held by Innovative Urban Transitions & Arid-region Hydro-sustainability (iUTAH), that focused on state-wide water conservation efforts and concerns. This project offered tribal communities a much needed voice in water resource discussions. In addition, Utah water research was infused with social justice and historical ecological knowledge.

Impact

- Shared the Ute culture through a research report, presentation, brochure, and blog posts
- Identified concrete steps that invite involvement by Ute members and officials in campus planning and education

Project Advisor

Dan McCool, Director
Environmental and Sustainability Studies Program

Budget

$6,000.00

Location

Red Butte Gardens

Partnership

Red Butte Gardens, iUtah, Friends of Red Butte

Project Executive:

Gavin Noyes
Public Policy

FALL 2013

University Student Apartments Composting

The University Student Apartments (USA) has a garden program where students are able to rent garden plots at low annual rates. Due to the popularity of the gardens, SCIF funding was allocated to create composting bins and a composting steward position. By managing the composting bins, the composting steward uses on-site compost that lowers the amount of food waste coming from the apartments. Additionally, the Composting Steward provides educational and community engagement programs for residents, which fosters a greater sense of community, a better understanding of gardening activities, and individual ownership of plot maintenance responsibilities.

Impact

- 220 compost plots created
- Approximately 440-660 students directly impacted

Project Advisors

Jen Colby, Sustainability Office
Rick James, University Student Apartments

Budget

$4,207.25

Location

University Student Apartments

Partnership

University Student Apartments, Sustainability Resource Center

Project Executive:

Susan Schreiner
Compost Steward

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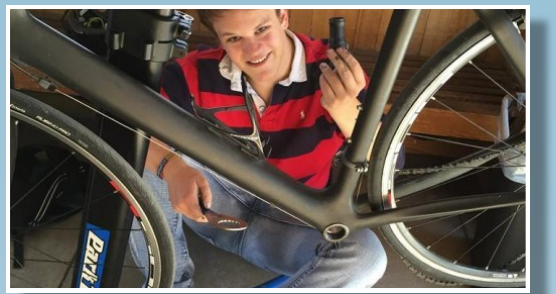

University Bike Collective

The University of Utah Bike Collective was originally envisioned to provide repair, maintenance, and education services to the bicycling community on campus. The shop was run through a partnership with the City Bike Collective and student volunteers until scheduling conflicts and a lack of student support led to its closure a few years ago. Fortunately, Erin Olson and Alex Zimmerman, the Campus Bike Coordinator, proposed to fund a pilot student-internship to run the collective. For three a the week the intern kept the doors open and fixed bikes at no cost. Currently, both Erin and Alex are in the process of reformatting the collective to better report to campus departments (including Commuter Services and Risk Management) and to provide a stronger support system to volunteers. This new structure will allow the collective to generate its own funds and to become a self-sustaining entity in the future.

Impact

- Re-opened the University Bike Collective
- Over 200 students have made repairs since the re-opening
- Available to all students three days a week

Project Advisor

Alex Zimmerman, Bicycle Coordinator
Commuter Services

Budget

$5,000.00

Location

Across from UMFA

Partnership

Commuter Services, Salt Lake City Bike Collective, Bennion Center

Project Executive:

Erin Olson
Environmental and Sustainability Studies/Geography

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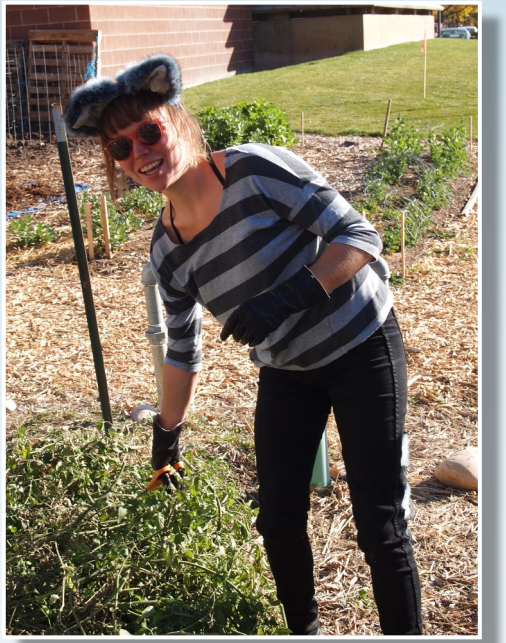

Edible Campus Gardens Enhancements

The Edible Campus Gardens Enhancements project is comprised of a series of upgrades to the gardens on the west side of the Sill Center. The Sill Center is undergoing a series of structural and cosmetic retrofits, that resulted in the slight relocation of the gardens. In addition to the relocation, the garden will be updated to reflect the needs and desires of multiple departments including Undergraduate Studies and Facilities management. Upgrades include plants such as espaliered trees, canning fruit, and a larger perennial herb garden. Additionally, upgrades to boxes and compost bins will enhance production as well as provide longer -lasting, attractive infrastructure. All of these enhancements will be accompanied by museum-quality signage in order to educate the campus community. Finally, the enhancements will also include a new, water-wise, irrigation system. The Edible Campus Gardens community feels that these changes are necessary to enhance operations, production, and to adhere to the aesthetic demands of administration.

Impact

- Provides a space for over 150 student volunteers
- Provides educational opportunities for students

Project Advisor

Jen Colby, Sustainability Coordinator
Sustainability Office

Budget

$21,225.75

Location

Edible Campus Gardens at The Sill Center

Partnership

Bennion Center, Sustainability Resource Center

Project Executive:

Natalie Edwards
Environmental and Sustainability Studies

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Double Your Dollars at The Farmer's Market

The Double Your Dollars initiative allowed students and anybody who received Supplemental Nutrition Assistance Program (SNAP) benefits to double their dollars at the U Farmer's Market through the use of one -to-one currency equivalent tokens. While the token service had been previously available, it was stigmatized and not widely used on campus. Because of this stigma, Annaleigh Sanderson proposed a pilot project that used Electronic Benefit Transfer (EBT) tokens as a way of awarding sustainable behavior on campus; increasing token visibility; encouraging the use of EBT at the market; and providing students with low-cost healthy food options. SCIF funded the supplemental purchases by doubling dollar-value with the tokens. For example, if you paid $5 you would then receive 10 tokens in return. Additionally, students received tokens if they rode their bike to the market or used the market's veggie valet, which stores their purchases in a refrigerator until 6 pm.

Impact

- 282 students utilized this service in its first year
- 95% of participants were able to purchase more food thanks to Double your Dollars

Location

University of Utah Farmers Market—Tanner Plaza

Partnership

University of Utah Farmers Market

Project Advisor

Jen Colby, Sustainability Office
Ayrel Clark, Sustainability Office

Budget

$2,450.00

Project Executive:

Analeigh Sanderson
Environmental and Sustainability Studies/Modern Dance

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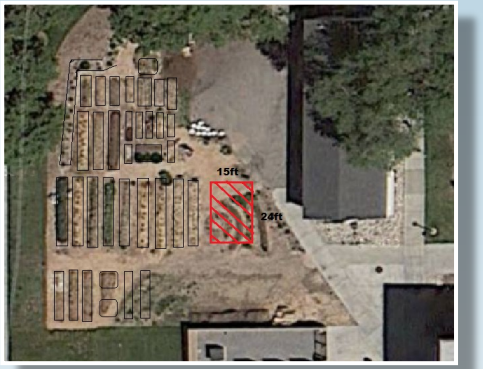

Hoop House

The Pioneer Edible Campus Gardens, in partnership with the Bennion Center, has seen an exponential increase in volunteers and supporters over the past year. The garden has been supplying a campus restaurant, Fiana, with student-grown produce. The SCIF-funded hoop house allows the gardens to increase their growing season, thereby increasing their ability to generate funds year-round and to provide programming for interested students who may not be on campus during the main growing seasons of spring and summer. The hoop house complies with the structural, production, and aesthetic desires of Facilities Management and Campus Planning.

Impact

- Extended growing season
- Provides an educational opportunity for students to learn more about organic food production
- Increased the number of organic gardening classes

Project Advisor

Jen Colby, Sustainability Coordinator
Sustainability Office

Budget

$3,230.00

Location

Pioneer Campus Gardens

Partnership

Bennion Center, Environmental and Sustainability Studies

Project Executive:

Georgie Corkery
Environmental and Sustainability Studies/Urban Ecology

SPRING 2014

Infant Childcare Upgrades

The Infant Childcare Upgrades project made the infant-care room a hazard-free and sustainably-furnished place for the infants of university staff and students. In 2014, the Department of Childcare was in the preliminary stages of retrofitting a room to serve infants under 12 months. The budget for the project was relatively fixed, and as a result, the Department and May sought SCIF funding to purchase natural and organic crib bedding; natural rubber and wood toys; BPA free dishes, utensils, chairs, and floor mats. Additionally, May Bartlett used the renovation opportunity to ensure that upgrades such as paint, furniture, and toys were Volatile Organic Compound (VOC), flame-retardant, and toxin free.

Impact

- Roughly 50 infants per year benefit from these upgrades

Project Advisor

Shauna Lower, Director
Child Care Coordinator

Budget

$5,500.00

Location

Alfred C. Emery Building

Partnership

U of U Childcare Center

Project Executive:

May Bartlett
Philosophy

SPRING 2014

Long-Term Bike Rental

The Long-Term Bike Rental project was a SCIF project that started a bicycle rental program at the University of Utah in order to cultivate lifelong, sustainable transportation habits within the student population. Introducing dormitory students to the bicycling lifestyle early in their transition to independence can curtail future commuting emission levels, while improving overall air quality and sustainability in the Salt Lake Valley. The long-term bike rental program helped create a new transportation standard for students by providing on-campus bicycle rentals and bicycle maintenance workshops. The project also worked in conjunction with the overarching SmartCommUte orientation project.

Impact

- 10 bicycles available for rent
- Decreased fossil fuel consumption

Project Advisors

Brenda Bowen, Global Change and Sustainability Center
Alex Zimmerman, Commuter Services

Budget

$8,775.00

Location

University of Utah

Partnership

Global Change and Sustainability Center, Salt Lake City Bike Collective, Commuter Services

Project Executive:

Emily Schulze
PhD Biology—Bowling Terrestrial Biogeochemistry Lab

SPRING 2014

Potential Hydrochemical Relations of Perennial Springs to Tar Sands Mining

Logan Frederick, Professor William Johnson, and a small group of graduate and undergraduate students studied the potential effects of tar sands mining on multiple perennial springs in the Uinta Basin. The site they surveyed is the first site in the United States approved for tar sands mining. The site in question is located on a ridge in a basin just above a valley and a spring-fed lake used by local cattle ranchers. While legal documents pertaining to this specific site have noted that spring water used by ranchers should not be affected by mining activities, there is no research related to hydrological pathways currently supporting or refuting these claims. To continue research Logan used SCIF to fund travel, gas, and hotels necessary for conducting off-campus research. This off-campus site may also be the location for the Field Geology course in 2015 (pending ongoing research), which would open up research opportunities for more students interested in geology and research field work.

Impact

- First study on the potential impacts of tar sands mining and water pollution
- Published study results on the potential for groundwater pollution from tar sands

Project Advisor

William Johnson, Professor
Geology and Geophysics

Budget

$4,000.00

Location

PR Spring Area—Southern Uinta Basin Tar Sands

Partnership

Department of Geosciences

Project Executive:

Logan Frederick
Geology and Geophysics MS

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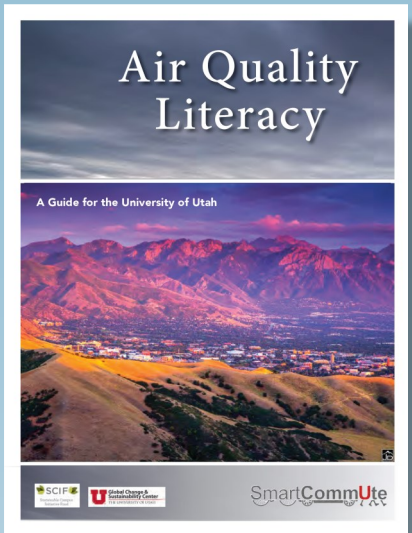

SmartCommUte

SmartCommUte is a multi-faceted project that incorporated the SmartCommUte Air Quality Literacy (AQL) document into student engagement and outreach strategies on campus. These strategies highlighted the benefits of "smart" commuting, thus changing the University community's commuting behaviors in ways that lowers emissions and helps the University meet its sustainability goals. The SmartCommUte AQL document used published data to highlight the region's air quality and was subsequently distributed to faculty, staff, and campus research centers to be used as supplemental course materials. These materials promote smart commuting options as well as information on walkable and transit-oriented neighborhoods. To ensure the sustainability of the SmartCommUte project a part-time student position was created in order to promote the SmartCommUte AQL document and engage stakeholders both on and off-campus.

Impact

- Creation of 1 internship in order to draft and develop the AQL document
- Creation of a guide that present air quality data alongside solutions

Project Advisor

Brenda Bowen, Director
Global Change and Sustainability Center

Budget

$4,476.00

Location

University of Utah

Partnership

Global Change and Sustainability Center, Commuter Services, Sustainability Resource Center

Project Executive:

Emily Nicolosi
Geography MS

SPRING 2014

Solar Dashboard

The Solar Dashboard project was the brainchild of Thomas Melburn, a student at The University of Utah. He came up with the idea to install a new online dashboard to display the energy production of solar panels on the J. Willard Marriott Library. The dashboard was designed and implemented by Thomas and additional students, and it will eventually appear on screens inside the Marriott Library. As an extra treat the dashboard also displays equivalency statistics such as barrels of oil not used and tons of carbon emissions avoided as a result of the energy produced by the solar panels. Unfortunately, there has been some trouble in integrating the new solar dashboard within the IT systems on campus. However, once the problem is solved the dashboard will become a great way to integrate curriculum with sustainable projects that are great learning opportunities as well as great sources of clean energy.

Impact

- Solar array produces enough energy to prevent the release of 60 tons of CO_2 annually
- Dashboard will be on display for the Library's 1,818,841 annual visitors

Project Advisor

Jeff Wrigley, Energy Manager
Facilities Management

Budget

$13,000

Location

Marriott Library

Partnership

ASUU, Facilities Management, Rocky Mountain Power Blue Sky Renewable Energy Program, sPower

Project Executive:

Thomas Melburn
Environmental and Sustainability Studies

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Tree Campus USA

The Tree Campus USA project was an effort, on the behalf of Parks, Recreation, and Tourism's Sustainability Committee, to help the University of Utah become recognized as a "Tree Campus USA" through the Arbor Foundation. The U is the State Arboretum; however, until recently only Weber State and Utah State received Tree Campus recognition in Utah. The project enhanced a walkway site near the Law library by planting 5 trees and several drought-tolerant shrubs in the vicinity. Students worked with landscape manager, Sue Pope, to coordinate planting and to select trees. This project led to the successful recognition of the University of Utah as "Tree Campus USA" and brought much needed attention to the University's urban forest.

Impact

- 8,000 square feet of grass and lawn converted to low-water landscape
- Annual conservation of 100,000 gallons of water

Project Advisors

Kelly Bricker, Parks Recreation and Tourism
Sue Pope, Facilities Management

Budget

$10,797.00

Location

University of Utah Law Building

Partnership

Department of Parks, Recreation, and Tourism, Facilities Management, Landscaping

Project Executives:

Troy Bennett, Elise Gatti
PhD Candidates—Parks, Recreation, and Tourism

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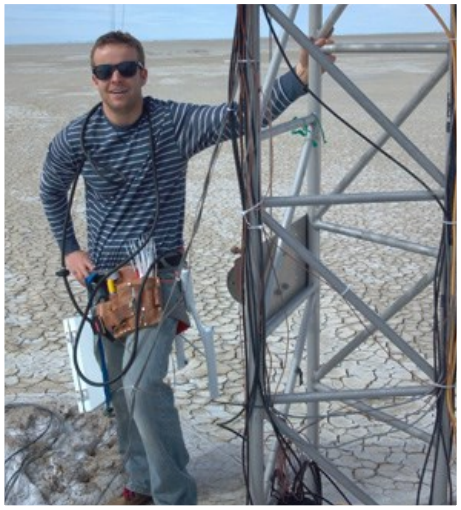
Zimride

Zimride is the largest rideshare program in the United States and is already in use at over 100 university campuses. The partnering campuses have demonstrated an average annualized reduction of 300,000 pounds of carbon emissions, as well as saving an average of $200,000 per year in vehicle operating costs. Zimride is part of the larger Smart CommUte Project, that was initiated by the interdisciplinary Global Change and Sustainable Center (GCSC). Smart CommUte focused on highlighting the importance of smart driving on campus and linked Zimride to a large campus-wide awareness campaign that educated the University community about Utah's air quality issues and the importance of carpooling.



Impact

- Decreases carbon emissions related to commuting to campus
- Provides a safe ride share program for students, faculty, and staff

Project Advisor

Brenda Bowen, Director
Global Change and Sustainability Center

Budget

$28,000

Location

Salt Lake Valley

Partnership

Commuter Services, Sustainability Resource Center, Global Change and Sustainability Center, Zimride

Project Executive:

Derek Jenson
PhD Candidate—Mechanical Engineering

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