Sustainability at WMU

Western Student Association
November 11, 2015

Harold Glasser & Derek Kanwischer
Office for Sustainability
Western Michigan University
Sustainability Goals:

1. Low overall impact on ecosystem services/person

2. High quality of life for everyone
The mission of the Office for Sustainability is to guide and assist the Western Michigan University community in fulfilling and growing its sustainability commitments. Through building a diverse and flourishing learning community around sustainability, we will continually explore and develop new opportunities to create a culture of sustainability and improve quality of life for all.
Mission and Vision

Mission
Western Michigan University is a learner-centered, research university, building intellectual inquiry and discovery into undergraduate, graduate, and professional programs in a way that fosters knowledge and innovation, and transforms wisdom into action. As a public university, WMU provides leadership in teaching, research, learning, and service, and is committed to enhancing the future of our global citizenry.

Vision
Nationally and internationally recognized, the University aspires to distinguish itself as learner centered, discovery driven, and globally engaged.

Learner centered
Western Michigan University is a university where every member of our community is responsive to and responsible for the education of our students. We challenge and engage all members of our community with a university experience that creates skilled, life-long learners.

Discovery driven
Western Michigan University offers experiences that enable discovery, and promote creativity and research. We are committed to pursuing inquiry, disseminating knowledge, and fostering critical thinking that encourages life-long learning. Our scholarship creates new knowledge, forms a basis for innovative solutions, leads to economic development, and makes substantial contributions to society.

Globally engaged
Western Michigan University impacts the globe positively. We are a community of learners committed to human dignity, sustainability, social responsibility, and justice. Our campus embraces a diverse population of students, faculty and staff who develop learners and leaders who are locally oriented and globally competent, culturally aware and ready to contribute to world knowledge and discovery.

The synergy of these three pillars enables WMU to be a premier and distinctive university of choice. Western Michigan University offers all students a learning community designed for and dedicated to their success. We are committed to access and affordability, and sustaining an environment in which every student can meet the world head-on and triumph.
Learning for Sustainability Framework

**Content**

What do We teach?

**Pedagogy**

How do we teach what we teach?

**Context**

Do we model our values and our commitments in everything we do?
Never doubt that a group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has

*Margaret Mead*
The Sustainability Fee Explained

Survey Implementation and Ongoing Projects Fund (includes $75,000 Student Sustainability Grant)
57%

Supplemental funding to Office for Sustainability
24%

Green Jobs
19%

Student Sustainability Fee distribution by account

Western Michigan University is proud to be Michigan's first college or university to adopt a sustainability fee. Students convinced the Board of Trustees to create the $8 per semester, $4 per summer session fee in early 2010, and since then it has funded 100% of three distinct accounts: The Student Sustainability Grant, the Survey Implementation and Ongoing Projects fund, and the Green Jobs fund. The remainder of funds generated by the fee are used to supplement the Office for Sustainability's general operating fund.

STUDENT SUSTAINABILITY GRANT

$75,000 is available annually through the SSG to fund student-authored proposals which promote a campus culture of sustainability and have the potential to benefit all WMU students. Western Michigan University is now a national leader in this area, offering more than twice the funding to students as Harvard. In addition, WMU’s Student Sustainability Grant Allocations Committee is 100% student led and includes representatives from all academic colleges and both undergraduate and graduate students. There are very few other programs in the world that include this level of student involvement. Instead, most grant decisions are made by committees composed mainly of faculty or staff. The SSG-AC reviews proposals twice per year. Deadlines, applications, guidelines, and a complete history of allocations may be found on our grants page. All funds from the SSG that are not allocated within a given fiscal year are rolled over to the Survey Implementation and Ongoing Projects Fund. Money for the Student Sustainability Grant is reserved from the Survey Implementation and Ongoing Projects Fund.
Survey Implementation and Ongoing Projects Fund (includes $75,000 Student Sustainability Grant) 57%

Supplemental funding to Office for Sustainability 24%

Green Jobs 19%
GET
$ GREEN $ SUPPORT
STUDENT SUSTAINABILITY GRANT
The Student Sustainability Grant funds up to $75,000 for research, activities, and initiatives that benefit all of the campus community by fostering a culture of sustainability.
Fall Application Deadline: November 19, 2015
Apply Here: wmich.edu/sustainability/grants
SSG Fall 2010–Spring 2015 totals

- 55 SSG Projects
- $350,000 Available
- $245,616 Requested
- $207,000 Allocated
Grants

STUDENT SUSTAINABILITY GRANT

The Student Sustainability Grant is available to all students who pay the sustainability fee. Any proposal that promotes a campus culture of sustainability and potentially benefits all students is eligible. Proposals must be safe, legal, adequately budgeted, and possible within existing University infrastructure to qualify. Selection is through a blind-review process by student peers.

QUESTIONS? Contact Derek Kanwischer at wmu-sustainability@wmich.edu or call (269) 387-0941.

ANNUAL DEADLINES

Proposals are due at 11:59 p.m. the Thursday before Thanksgiving (fall allocation) and 11:59 p.m. the Thursday before Spring Break (spring allocation).

APPLICATION PROCESS

1. Find a faculty or staff advisor
2. REVIEW PREVIOUS GRANTS
3. READ THE HANDBOOK
4. DOWNLOAD THE APPLICATION
5. Download and install Adobe Reader (optional)
6. Print, complete, and sign your application
7. You may email or submit a hard copy to the Office for Sustainability up until the due date.
   Email applications to: wmu-sustainability@wmich.edu
   (Please disregard other references suggesting that only one or the other will be accepted)
Annual SSG Deadlines

Proposals are due at 11:59 p.m. the Thursday before Thanksgiving (fall allocation) and 11:59 p.m. the Thursday before Spring Break (spring allocation).
I WANT YOU

TO CHOOSE

TAKE THE STUDENT SUSTAINABILITY SURVEY
www.wmich.edu/sustainability March 13 - March 29

Thursday, April 16

Wesustain Community Celebration

12:00 – 1:00
Student Sustainability Survey Town Hall
Sustainability Survey Discussion
Food and Prizes

1:30 – 4:00
DIY Demonstrations
Student Sustainability Grants
Bike Repair
Aquaponics
Green Woodworking

4:30 – 6:00
Community Open House & Celebration
Sustainability Champion Awards
Food and Live Music

all events located at the Office for Sustainability
www.wmich.edu/sustainability/events
sponsored in part by: Milton M. Ratner Foundation
“I think sustainability is important no matter what your major is. Most people think it only relates to biology or environmental science, but it’s more than that. All students can connect sustainability to their major and personal life.”
Take the next step towards sustainable living in the
Gibbs House Fellowship Program

Gibbs House Fellows work on campus sustainability projects and programs while living in the historic Gibbs House. The program runs from August 15, 2015 through July 15, 2016.

Be a part of our Gibbs House Permaculture Development Project!
- Student Research
- Community Events
- Leadership Development
- Applied Learning
- Sustainability Education
- Extensive Gardens
- Perennial Food Forest
- Hoop Houses
- Food Preservation
- Natural Building
- Alternative Energy
- Permaculture

Apply for the 2015 fellowship: Submit by March 30, 2015
Monthly potlucks, updates, info sessions, and application:
wmich.edu/sustainability/opportunities/gibbs
Internships

Meet our Fall 2015 Interns!

Fall 2015 Interns Top: Brendan Sapato, Destineee Wells, Erika Foźilik, Muzaddal Bottom: Kate Dusenbury, Eric Carlo, Areelle Taule, Tyler Yon Eick

Gibbs House

The Gibbs House is an emerging program run by the Office for Sustainability that serves as a living laboratory for students to...
We sustain 2015 Spring Internship Applications are due:

December 1\textsuperscript{st}

Gibbs Fellowship 2016-2017 Applications are due:

March 30\textsuperscript{th}
Congratulations David Bere!

Civic Newman Fellow

Student Employee of the Year
Sustainability

Dig in and submit a Student Sustainability Grant! The fall semester deadline is Thursday, November 19.

EVENTS/INFORMATION

**Werner Sichel Lecture Series**
The Department of Economics at WMU hosts speakers and events during the year that are thought-provoking for those interested in economics, development, and environmental policy. [More info>]

**WHERE:** 2028 Brown Hall, WMU, Kalamazoo

**WHEN:** varying Wednesdays monthly from September 23 through November 11, 12:00 p.m. - 1:15 p.m.

**COST:** FREE

**Fall Harvest Festival**
Join the Healthy Living Club for locally grown food from the Gibb’s House and live music by Marrow and Stone. This is also an official art hoo location featuring art from the WMU Modern Painter’s Society. [More info>]

Office for Sustainability
Western Michigan University
Kalamazoo MI 49008-5286 USA
(269) 387-0943
Sustainability Video Archive

https://www.youtube.com/user/WMUSustainability/videos
Event Series
The mission of the Office for Sustainability is to guide and assist the WMU community in fulfilling and growing its sustainability commitments. Through building a diverse and flourishing learning community around sustainability, WMU will continually explore and develop new opportunities to create a culture of sustainability and improve quality of life for all. Operations got underway during Fall 2012 in a newly renovated building at the corner of Howard Street and West Michigan Avenue. The space contains a mix of re-purposed furnishings and equipment and new sustainability technologies. You have to tour it to take it all in. Look for the Wesustain sign.

The new Zhang Legacy Collections Center hosts a range of historic documents and photographs including nearly 200-year-old news articles. The building was built to LEED Silver specifications. In addition, the building has an integrated geothermal heating and cooling system, which uses local temperature differences to heat or cool based on needs.

Sangren Hall is one of the newest buildings on campus and is a testament to WMU’s dedication to green buildings. An astonishing 35% of materials used to construct the building were recycled. During the tear down of the previous Sangren Hall, 93% of its materials were diverted from the landfill, totaling more than 29,000 tons. Sangren Hall hosts a green roof with plants that absorb rainfall and help insulate the building. The parking lot was constructed of porous asphalt so that heavy precipitation flows directly into the storm water basin beneath. The building is also the home of campus’ largest rooftop solar array.

In 2007, a wind turbine was erected at The College of Engineering and Applied Sciences. The turbine features three six-foot blades, and can be seen off of the US-131 highway. Producing two kilowatts (kW) of power, the turbine can power ¼ of the electricity for an average home. Current plans include increasing the output of the turbine to five kilowatts in the near future. Dr. John Patten spearheaded the effort to bring this source of renewable energy to campus.

Oil to Mowers is a pilot project exploring the use of spent cooking oil as an alternative fuel source to support Western Michigan University’s commitment to carbon neutrality. After use in Dining Services campus fryers, soybean oil is super-filtered into a holding tank at the Bernhard Center loading dock for use in a diesel lawnmower. If successful, Oil to Mowers could be extended to larger, higher mileage vehicles in WMU’s fleet. At full implementation, the project could substantially reduce carbon dioxide emissions from consuming petro-diesel and save the University money.

The Gibbs House is a program of the WMU Office for Sustainability that provides experiential opportunities for students to live and learn in a dynamic residential setting. Year-long fellowships are offered for students who engage with and lead projects to enhance campus sustainability across a range of academic disciplines. The future development plan at the Gibbs House property features an extensive perennial food forest, annual vegetable garden, food preservation facilities, community education center, solar panels, and many other exciting resources to facilitate sustainability education at Western Michigan University. Stay tuned for information regarding future programming at the Gibbs House.

WMU has a national leader for developing an EV charging station infrastructure. We have more than 20 charging stations, with 15 in front of the Miller Solar Array alone. Other locations include the Physical Plant, Sangren Hall, The Office for Sustainability, The Engineering Campus, and Western Hall. The use of the EV charging stations offset an impressive 142,720 pounds of carbon emissions per year by utilizing vehicle battery packs as storage for excess power produced at the WMU Power Plant during the night. This offset reduces operation costs and green house gas emissions. The EV charging stations are used by five, all-electric work vans and a broad array of personal vehicles that are charged while on campus.

Western Michigan University students have free access to municipal and University bus lines. Partnered with Metro Transit, the bus programs cover all areas of Main Campus, Parchman Campus, and downtown Kalamazoo, allowing students to travel virtually anywhere in Kalamazoo County. Buses depart every half hour, lessening inconveniences associated with long wait times and facilitating the system’s use. All buses are equipped with a bike rack up front, so cyclists are welcome too! Students and riders can track their bus’ arrival via Bronco Mobile.

The Physical Plant Control Center is housed in the Facilities Management offices at the confluence of Stadium Drive, Oakland Drive, and Lovell Street. Facilities Management is responsible for managing all 8 million square feet of university space, more than 65 miles of sidewalk and roadway, and 1,200 acres of university grounds. The Center is technologically advanced and integrated allowing Facilities Management to control and monitor many building functions to minimize energy consumption and waste.

Most electricity used on campus is produced at our power plant. As a greener and cleaner alternative to burning coal, the WMU power plant has two generators that use natural gas. The cogeneration plant produces heated steam as a byproduct of the combustion process, which is used to heat and cool facilities around campus. The facility produces 75 million kWh and 510 million pounds of steam annually, and combined with our renewable energy and conservation practices, satisfies the majority of our campus energy demand.

WMU has taken a leading role in implementing permaculture as a design concept for several projects on campus. The Community Garden on Stadium Drive is open to anyone in the community and is the largest known community garden in the Kalamazoo area. Last year, the 7,500 square foot community garden, consisting of 25 different varieties of vegetables, yielded over 500 pounds of produce that was harvested and used on campus for educational and celebratory events.

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Facts and Figures

- Founded: 2003
- Property Size: 1.75 acres
- Elevation Change: 7 feet
- Latitude: 42°15'33.76" N
- Longitude: 85°38'24.32" W
- Fellows: 4-5
2015-2016 Permaculture Crew

Eli Lowry
Vermicomposting & Compost Hot Water Heater

Ali Leist
Black Soldier Fly Composting

Max Hornick
Aquaponics & Farm Hand

Katie Dziepak
Rainwater Systems & Farm Hand

Josh Wolford
Edible Mushrooms

Kelsey Pitschel
Compost Hot Water Heater

Allie Spring
Special Projects

Silas Kachman
Farm Hand & Edible Mushrooms
a
ALL-NATURAL
Living, Learning
LABORATORY
IMAGINE a building designed and constructed to function as elegantly and efficiently as a flower.
Outcomes

Sketch from Team SimpLine
Sustainable Café Initiative

- 2007: Student Led Café Ash Norton
- 2008: WISCC: Weekly Initiative for a Sustainable Café
- 2010: The Purple Potato Café
- 2011: The Campus Beet Café Business Plan
- 2011: Internship Opportunities with Campus Beet
- 2012: The Campus Beet: Café events / programming
- 2013: Spatial Analysis Report: Best practice research
- 2014: Campus Trends Reimagining: Café event
- 2015: Healthy Living Club: Food and programming
Student-Centered Sustainable Café

ENVS 4100: Appropriate Technology and Sustainability
The Campus as a Living Learning Laboratory
Dr. Harold Glasser

By: Taylor Sawyer, Conor Downey, Marianne Twork, Nora Gimpel
Student Centered Cafe
Student Centered Cafe

Fresh Beet Cafe (Student Design Concept)
Healthy Living Club
Harvest Fest (11-6-15)
The Makings of a Local Loop
Aquaponics
Building Community with Bikes

Bike Stable receives Student Sustainability Grant for do-it-yourself bicycle shop

Read more >
The Open Bike Shop Crew welcomes you every Friday from 12:00 p.m. - 5:00 p.m.
Open Roads in search of amazing person to be its new Executive Director!
Open Roads New Executive Director: Erin Denay
Thank you

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Contact Information:

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w: http://www.wmich.edu/sustainability/
The world we have made as a result of the level of the thinking we have done thus far creates problems we cannot solve at the same level of thinking at which we created them.

*Albert Einstein*