November 21, 2013

Presented to the President’s Universitywide Sustainability Committee (PUSC).

Presented by the Office for Sustainability (OfS).

I’ll be reviewing campus sustainability highlights from the past year. I hope to leave you proud of campuswide efforts on all fronts. And I hope to leave you excited about our foundational research, action research, and a growing number of efforts led by campus sustainability champions to infuse sustainability and climate change across research and teaching.
WMU Office for Sustainability: Mission
Sept. 30, 2010

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.
We have accomplished a lot in the last 5 years with help and guidance from this committee which formed in 2008.

The PUSC published the first Strategic Sustainability Initiatives Report in 2009.

Your students passed the student sustainability fee in 2010 and the OfS was created.

The OfS moved into this space and accelerated our programming at this time last year.

During this presentation you will see evidence of our anticipatory approach to universitywide sustainability.
A robust response to the ecocultural crisis facing human beings as a species demands a re-imagining of education that cuts across Content, Pedagogy, and Context.

Transformational change in our institutions requires that we ask these questions.

At the Office, we emphasize the Context.
55% of our budget comes from general funds for the OfS including Solid Waste Reduction.

41% comes from the Student Sustainability Fee (SSF). Students pay $8 per semester and $4 per summer term.

The SSF has three components including projects (and grants), Office, and Green Jobs.

Graduate Assistant support and grant support are additional and variable.
With the Green Jobs portion of the SSF we can support students.
To date, we have worked with 101 students. These photos show many students from the first cohort.
Many students in our current cohort are shown here.

Kate (top left star) is supported through a grant from Honeywell. Kate is pursuing a PhD and is conducting behavior research.

Jamie (middle star) shown here, is supported by the Provost and is conducting a best practice literature review of core competencies in learning for sustainability.
**WeSustain Internships**

WeSustain Internships are open to all students who pay the sustainability fee. Interns participate in leadership and discovery-driven learning opportunities and are paid to research and work on campus sustainability projects and policies for one year.
Student Highlights

101 Students (up through Fall 2013)
52 Men
49 Women
91 Green Jobs
53 Wesustain Interns
14 Gibbs House Fellows

Student involvement has continued to grow since 2010 with demographic information shown here through 2013.

We generally refer to all student opportunities with the office as Green Jobs because not everybody becomes an intern. We are updating our internship curriculum to better provide leadership and skills development.
Student Highlights

101 Students (up through Fall 2013)
  52 Men
  49 Women
  91 Green Jobs
  53 Wesustain Interns
  14 Gibbs House Fellows
    8 Seita Scholars
  11 Graduate Students
  11 Work Study
  16 Presented at or attended national meetings
  10 Countries represented: (e.g., China, Haiti, Poland)

Dozens of volunteers

Moving forward, we will also expand our recruitment efforts so that our programming maximizes global engagement and honors diversity at WMU. And we will continue to utilize volunteers wherever possible.
This year, interns operated the largest community garden in Kalamazoo behind the Stadium Drive apartments. Half the 35 registered members have already signed up for next year.
Interns in our Bike Stable program hosted weekly shop nights that are open to the public.

In the past year we have had 340 visitors.
Interns continued EcoMug distribution this year.
Interns were provided leadership experiences, in this case a visit to Growing Power in Milwaukee. Growing Power is perhaps the most well known urban farm in the U.S.
In this busy year, our students have been critical in helping to creatively program and operate in the Office for Sustainability space.
Our students and staff also moved the WMU student production garden from the Gibbs House property, on Parkview Avenue, to a spot behind Stadium Drive apartments. Will and the permaculture team grew 25 unique crops on 7,500 sq feet of new production garden space. 353 lbs of produce were delivered to the Bernhard Center Cafeteria, and 172 lbs were used for food preservation workshops and events.
Student Sustainability Grants (SSGs)

http://www.wmich.edu/sustainability/grants

The SSG is available to students who pay the Sustainability Fee. Proposals are selected through a blind-review process of student peers.
Student Sustainability Grants are supported by a portion of the Sustainability Fee from the Projects fund.

Here are four examples from this year.
The aquaponics team is growing fish and plants in a closed loop indoor system in the Sustainability Studio. The Office has adopted this project, dedicated interns to manage it, and plans to expand on it first with a student run competition to design a more advanced indoor system.
An apiculture team, spearheaded by Students for a Sustainable Earth, established a thriving apiary near the WMU Parkview Campus. They produced 180 lbs of honey and used some of it to produce products like lip balm and hand lotion. They have also gratuitously donated jars of honey that have been used as sustainability prizes.
A Western Student Association team conducted a shirt swap to encourage students to make personal commitments to sustainability.
A proposal to design an improved amphitheater adjacent to Dunbar Hall ran into administrative barriers and has been abandoned.

Over 20 SSG projects have been completed to date and we continue to gain insight into promoting, assisting, and improving project management.
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).

Please encourage and work with students to help them develop SSG proposals!

The most competitive and successful proposals are typically advised or sponsored by WMU faculty.
The Gibbs House Fellowship program is a special, residential form of the Wesustain Internships.
In addition to the normal Wesustain Intern responsibilities, fellows live in the historic Gibbs House across from Asylum Lake. The Gibbs House property is undergoing changes.
You can see the 2012 property footprint, with house, barn, and garden spaces.
Here is our permaculture vision for the newly defined property, which came about as a result of our new neighbor, Newell Rubbermaid, who is building their world design headquarters in the last property of the Business, Technology, and Research Park.
This change has absorbed a great deal of our time, but it provides an amazing opportunity. We envision a permaculture themed education center including a seven layer food forest, native plant garden, hoop greenhouses, walking paths, leadership development challenge infrastructure, a presentation space, and a solar demonstration project. Our intern Kelsey is preparing to launch a collaborative student and community member design competition for the presentation space and integrated solar demonstration project. The property design is in review by the University.
Students, staff, and volunteers have begun staging materials and preparing select plant beds.
You can see Newell Rubbermaid Facility just off the back of the Gibbs House property. We’ve been able to adapt to this change and we see many benefits, including increased visibility and the opportunity to establish a more permanent research space.
The projects that I’ll review now represent efforts supported by funding from the projects component of the Sustainability Fee as well as the Waste Reduction program. This work is helping us establish indicators that we will need to track for years to come.
The OfS website is up and running and we update it daily with events, news, and promotional content. It also houses project information, our growing publications library, and links to our social media sites and video.
We facilitate an annual Student Sustainability Survey.

1250 students responded this year, up from 800 in the previous year.
The EcoMug program was sponsored again this year by Consumers Credit Union.
And we’ve distributed over 3,100 mugs so far this year. Bringing our total to over 12,000 mugs to date.
Complementing the EcoMug program, we are up to fifteen newly installed water bottle filling stations, and we’ve added signage. This work is a good example of how we can apply unused grant money to support projects students have prioritized.
To promote these and other initiatives, and make sure that Western is institutionalizing and cross-promoting sustainability efforts, we ran our Sustainability Event/Speaker Series again this year. We worked with every college to sponsor and host Dr. Mitch Thomashow in February. Event sponsors can be reviewed on our wall of posters in the back. Mitch focused on leadership and change in administration, curriculum, and research. He met with students, faculty, and the community, and he delivered a public lecture titled the Nine Elements of a Sustainable Culture and Campus.
We again hosted SustainabiliBASH at the Gibbs House, which is an annual event targeted at student awareness, participation, and most importantly, fun!
Jonna Johnson and the Office worked with many community supporters to host Dr. Dorceta Taylor from the University of Michigan. She focused on justice and sustainable food systems. She too met with students, staff, faculty, and community.

And she delivered a public keynote titled Race, Poverty, and Access to Food in America: Resistance, Survival, and Sustainability. The house was packed.
We just wrapped up National Campus Sustainability Day at the end of October.

The Community Roundtable featured sustainability leaders addressing what sustainability means to them. Panelists included Dr. Dunn, Mayor Hopewell, the Kalamazoo Community Foundation, and leaders from the Office of Diversity and Inclusion, the student body, and faculty.

Other events included an open house (there is Will with a variety of pickled produce). There was an event celebrating ongoing work with Honeywell to identify Energy Conservation Measures across campus. Kate Binder’s research project investigating the potential of electricity dashboards to reduce consumption was also highlighted.

Our first ever Sustainability Slam was a huge success. Stay tuned for the video of the event. We were able to provide a venue to help identify emerging sustainability leaders and ideas from the community, and we will certainly repeat the event.

We conducted campus tours and produced a new map.
Pick up your copy at the front desk, and please give us any feedback you have.
We have continued to investigate and promote deep green buildings through Living Building Challenge work we detailed last year.
Students conducted meetings and workshops and honors student Nicole Pascaretta worked with Giovanni Roberto and Dr. Machiorlatti to create a video.
We showed it in a session during National Campus Sustainability Day.

So, we can track website hits, survey responses, EcoMug distribution, and attendance at events and we can promote the most sustainable buildings, but how do we really know that all of this is working?
As a signatory to the American College & University Presidents’ Climate Commitment, and following from our 2012 Climate Action Plan, we have institutionalized routine Greenhouse Gas emissions tracking.
Between 2008 and 2012, WMU substantially reduced emissions. There are two reasons. The primary reason is that we purchased less electricity generated from the burning of coal from Consumers Energy (Scope II in these pie charts), and substituted natural gas used in our own cogeneration power plant to generate electricity and heat for steam. Burning gas results in fewer emissions. The secondary reason for our reduction is related to the availability of better commuting data in 2012 (part of Scope III above). We believe that our 2008 estimate was too high. We trust our 2012 estimate, and are now in a position to better track commuting emissions.
Our emissions were low to start with compared to other institutions based on decades of aggressive energy conservation at WMU! Our climate action plan contains this projected GHG trajectory that can chart our course to carbon neutrality by 2065 across several emissions categories. Our current inventory indicates that we are ahead of schedule. This is our first institutionalized indicator that we will use over time to track our path toward universitywide sustainability.
The next indicator is solid waste reduction, with data shown here for the calendar year 2012. Around 2009, Carolyn Noack started using a reporting structure from the US Environmental Protection Agency called WasteWise, which called for an effort to identify all campus waste streams, and we are now confident that we can track all significant waste streams over time and report waste minimization progress.
Collaboration Highlights

I want to highlight a couple of collaborations that blossomed this year.
We’ve worked with Dr. Brylinsky and graduate student Kim Juwong from Institutional Effectiveness on strategic planning, and the STARS system. This committee (PUSC) spent a good deal of time developing sustainability definitions for coursework and research, which I will come back to.
First Year Experience

- Fall Welcome Video
- FYS Sustainability Presentations and Video Project/Competition Collaboration
  http://www.youtube.com/user/WMUSustainability

We again worked with First Year Experience/First Year Seminar, showing a sustainability Fall Welcome video and running presentations and video projects for 17 sections or 340 students. This year, winning videos will be shown at Miller movie night.
Demand is high for building tours and open houses. We estimate that we have conducted over 100 building tours for groups ranging from 1 to over 60 in size. We often ask our guests to make a sustainability pledge on our white boards.
Bikes for Transportation

- Bikeshare
- Infrastructure
- Grants

We worked with community partners on three bikes for transportation efforts.
Kevin Martini conducted a best practice review and presented to project partners including the Mayor and key community leaders. He also presented the work at a summer conference. The presentation is available on our website. We are fostering the growth of a bicycle coalition promoting bikes for transportation, and the groups first effort is focused on improvements at the Stadium Drive, Lovell, Oakand, and Academy intersections.
A collaborator at Kalamazoo College produced renderings, this one looking northeast on Stadium Drive at the Academy intersection.
Note suggestions for improved crossing infrastructure, green path markings, and protected bike lane suggested on the right side.
Here is the spot where Lovell crosses Oakland and Stadium Drive.
And here are some suggestions to spur discussion.

To support these and other efforts, the OfS seeks grant and foundation support.
Grants/Support Highlights

Secured:
$50,000 Milton Ratner Foundation (To build on START)
$8,000 Consumers Credit Union (EcoMug sponsorship)

Declined:
$130,000 Wege Foundation (Gibbs House Education Center)
$34,800 Kalamazoo Community Foundation (Bike planner)
$25,500 Bikes Belong (Bike infrastructure)

We could use help:
• Critique grants
• Collaborate
• Share grant opportunities

While I would love to report that we brought in another million dollars this year, I can’t. Here is brief summary and reminder that this committee is always encouraged to help.

WMU continues to build on our sustainability recognition, and we are seeing a growing number of sustainability champions on and off campus.
And sustainability shows up in interesting places. Like here, on T-shirt logo we’ve seen, above “Row the Boat”.
Collaborators have added 30 more combined waste and recycling stations and signage. The rollout of recent waste reduction efforts is part of Carolyn’s master plan, which we anticipate finalizing in early 2014. These efforts would not be possible without collaboration from other champions like Steve Gilsdorf.
The new Sangren Hall has 235 kW of solar P.V., the third and largest installation on campus. Pete Strazdas and the Facilities Management team are certainly sustainability champions.

Sangren was a convenient place for a photo when WMU received the 2013 Green Leader Award from the Detroit Free Press.
Our previous 50 kW solar installation was paired with EV charging stations near Miller Auditorium.
The original 12 kW installation is on the roof of Wood Hall and can be seen in this aerial photo provided by Dr. Pancella in the smaller yellow circle.

The new Sangren Hall array can be seen in the larger yellow circle.

Look at all those rooftops. Some of us are asking, can we cover them with panels?

Some of you might be thinking about the stormwater runoff generated in spaces like this. But you should know that WMU is far ahead of other institutions in capturing or treating the majority of stormwater on campus, rather than letting it rapidly run off to nearby water bodies. We are exploring stormwater management as another indicator of campus sustainability.

So we can track emissions, waste reduction, and maybe stormwater management. These and other indicators help us with sustainability context setting in the operations realm. But how will we know that students are leaving WMU undaunted by the sustainability challenges we all face? How do we measure their knowledge and ability to be agents of change?
Last year we reported on the StART Initiative which began with a faculty survey led to a luncheon series, and led us on a path of discovery in core competencies, learning outcomes, sustainability program best practice reviews, and discussions about literacy assessments. This dovetailed nicely this year with STARS and strategic planning.
Jamie and Harold recently presented a 3.5 hours session on the core competencies work to 110 people at a National Campus Sustainability Conference this summer in Nashville. You might think that participants were bored, but no, they used mobile devices to provide feedback during the session.

Draft sustainability learning outcomes were recently put before a subcommittee of the WMU Faculty Senate.

Continuing this work has become a major follow-up priority in our ongoing grant seeking activity. And we are planning a Spring Sustainability Event to further leverage interest that faculty have already demonstrated.
Sustainability Across Research & Teaching Initiative – work continues

- StART II - Faculty Learning Community
  - Testing the PUSC-developed sustainability definitions
  - Exploring and encouraging new courses and updates
- Literacy assessment is a frequent discussion topic
- Collaboration with faculty on a graduate certificate program in sustainability
- StART III with the Office of Faculty Development
- Faculty Senate subcommittee reviewing general education is reviewing draft sustainability learning outcomes

StART work continues, and I want to highlight the work of the StART II Faculty Learning Community led by Dr. Davis and Dr. McGee.
So Where are We on the Academic and Research Side?

- 2012-2013 existing academic course review is underway
- OfS faculty resources page has been developed
- 400 recent course/program change requests to be reviewed
- OVPR is nearly ready to roll out an experts database
- New faculty sustainability champions are being identified
- Haworth College of Business adopted a core sustainability course requirement
- More faculty are doing research on quality of life topics
- OfS is planning Spring events to help leverage and support progress
Next Steps

- Annual PUSC meeting schedule
  - January, March, September, November
- Refresh committee memberships and alternates
- Subcommittees
  - Develop guidelines
  - January discussion

Introduction to a new PUSC schedule beginning in 2014.
Brief Discussion - Subcommittees

- Emissions/Climate Action (PUSC subcommittee)
- Waste (OfS, Carolyn)
- Stormwater (OfS, Jeff)
- Curriculum Infusion (PUSC subcommittee)
- Research Infusion (OVPR)
- Administrative Policy Alignment
- Engagement
- Community Collaboration (OfS)
- Investment Alignment?

Brainstorm list of potential subcommittee topics.
Thank You

Admissions • Office of Faculty Development • Athletics • Family and Consumer Sciences • Environmental and Sustainability Studies • EUP • Service Learning • Associate Provost for Institutional Effectiveness • Provost's Office • Office of Business and Finance • Graduate College • Office of Diversity and Inclusion • Lee Honors College • First Year Experience • Student Affairs • Office of Community Outreach • Dining Services • Catering • University Relations • Faculty Senate • Satta Scholars Program • Residence Life • Environmental Health and Safety • Development Office • WSA • GSAC • CEAS • HCOB • College of Aviation • College of Fine Arts • College of Education and Human Development • CHHS • CAS • FM • Campus Planning • Landscaping • OVPR • Interdisciplinary Humanities Climate Change Working Group • Custodial • BDGC • AASHE • ACUPCC • ULSF • Campus Ecology • Climate Savers Computing Initiative • USGEC • PeaceJam • Sustainable Endowments Institute • EPA Energy Star • CURC • MRC • Clean Energy Coalition • Second Nature • Nature Center • Chamber of Commerce • City of Kalamazoo • SWMISBF • Kalamazoo Bike Club • TOAD • Open Roads • Consumers Credit Union • SWMI Regional Sustainability Covenant

There are many more people, units, and community members to thank.

Thanks for supporting the journey.