

Meeting Summary September 29, 2016

Council Members Present:

Carlo Colella, Vice President for Administration and Finance (Chair) Linda Clement, Vice President for Student Affairs Cindy Hale, Associate Vice President, Office of the Provost Ann Tonggarwee, Assistant to the President Maureen Kotlas, Executive Director, Environmental Safety, Sustainability & Risk Scott Lupin, Assoc. Dir., Environmental Safety, Sustainability & Risk, and Director, Office of Sustainability Mary-Ann Ibeziako, Director, Department of Engineering and Energy David Cooper, Assistant Director of Systems Architecture, Division of IT Steve Cohan, Professor of Practice, Plant Science and Landscape Architecture Joseph Sullivan, Professor, Plant Science and Landscape Architecture Samantha Bingaman, Undergraduate Student, Environmental Science and Policy Adria Schwarber, Graduate Student, Computer, Mathematical and Natural Sciences

Guest: Sean Williamson, Environmental Finance Center

Meeting start time: 1:00pm

Meeting Highlights

Welcome and Review of April 29, 2016 Meeting Minutes

Carlo Colella welcomed the Council members and called the meeting to order. Meeting summary from April 29 was approved.

Sustainability Progress Report 2016

Sally DeLeon from the Office of Sustainability presented highlights and the Progress Summary for the 2016 Sustainability Progress Report. The full report will be released in late October/early November. See appendix A for Progress Summary and Highlights.

Climate Action Plan (CAP) 2.0

Mark Stewart and Sally DeLeon from the Office of Sustainability presented the Council with the soon-tobe finalized Climate Action Plan 2.0. It will be released once final approval has been received from the Council. Mark and Sally highlighted the Introduction, Progress graph, Targets, and Carbon Reduction Strategies graph. The following strategy tables were reviewed: Power and Commuting. Strategies for Air Travel, Solid Waste, Land Use and Maintenance, Purchasing, and Education and Research will be reviewed at the November meeting. CAP 2.0 can be viewed on-line <u>here</u>.

Sustainability Fund Summary

Mark Stewart updated the Council that the Sustainability Fund Summary for 2015-2016 has been completed and will be posted on-line. See appendix B.

Adjourn: 3:00pm



This Year's Highlights

2016 Campus Sustainability Progress Report Highlights

UMD achieved its **2015 Climate Action Plan target** by reducing campus greenhouse gas emissions more than **25%** compared to 2005. Continued support from the campus community will be needed to stay on track for the 2020 target of a **50%** reduction.





The university co-hosted an **international Climate Action 2016 forum and summit** for nearly **700** leaders from business, state and city, philanthropy, multilateral institutions, and civil society to accelerate global action on climate change. The events built on the momentum of the **United Nations (UN) Paris Agreement** which aims to reduce global emissions and promote adaptation to climate change.

The Green Office Program celebrated 5 years of participation from offices across campus. The program started in 2011 and 17 offices were certified the first year; now almost 150 offices are participating, 82 of which were certified at the start of the 2016-2017 academic year.

More than **120** bikes are now available at **15** stations throughout campus and College Park through mBike, a new bike-sharing program that was launched in the spring of 2016 for students, faculty, staff, visitors and community members.



By refilling bottles with filtered water from **Terps I the Tap** bottle filling stations around campus, members of the UMD



community and campus visitors prevented the disposal of almost **3** million plastic water bottles. Bottle filling station use has increased an average of **660%** annually over the last three years.

The University System of Maryland Foundation announced that it will stop investing the **university's endowment** directly in the top 100 public coal companies and the top 100 public oil and gas companies, and it will seek out more sound investments in renewable energy companies. The Foundation manages more than \$380 million in endowment assets for UMD.





2016 SUSTAINABILITY REPORT

Progress Summary

The following table presents a snapshot of the indicators that were used to create this report. The column farthest to the right provides a quick view of how each indicator trended over the past four years.

- = progressing toward sustainability
- = no significant progress
 - = trending in the wrong direction

UNIVERSITY OF MARYLAND SUSTAINABILITY METRICS

Indicator	Units	2012-2013	2013-2014	2014-2015	2015-2016	FY/CY	Trend
CARBON NEUTRALITY						, .	
Campus-wide Greenhouse Gas Emissions	MT-CO2e	276 833	278.067	256 141	246 504	CY	
Greenhouse Gas Emissions per Capita	MT-CO2e/ETE person	6.5	6.5	59	56	CY	
Greenhouse Gas Emissions per Area	MT-CO2e/1000 sq. ft	19.2	191	17.3	16.7	CY	
Overall Greenhouse Gas Emissions Reduction	% since 2005	-19%	-18%	-25%	-27%	CY	
Power Greenhouse Gas Emissions Reduction	% since 2005	-10%	-11%	-19%	-28%	CY	
Air Travel Greenhouse Gas Emissions Increase	% since 2005	45%	47%	4.3%	52%	CY	
Commuting Greenhouse Gas Emissions Reduction	% since 2008	-30%	-28%	-28%	-21%	CY	
Steam Production	MI bs	696150	759 450	758 581	757724	CY	
Electricity Consumption	MWh	268.632	267 313	272 400	276.044	CY	
EM Energy Conservation Projects	MWh annual savings	19 487	21,489	23 337	24 554	EY	
Renewable Energy Purchased	MWh	13,10,	25,450	65.081	87164	CY	
Student Commuter Parking Purchases	nercent of students	23.0%	22,490	21 3%	23 3%	CY	
Eaculty and Staff Commuter Parking Purchases	percent of employees	73.0%	75.5%	67.0%	66.7%	CY	
r dealty and starr commuter r arking r archases	percent or employees	/ 3.070	73.370	07.070	00.770	C1	
EDUCATION FOR SUSTAINABILITY							
First Year Sustainability Education	percent of students	48%	54%	43%	60%	FY	
Sustainability Studies Minor Students	count of students	213	252	286	321	FY	
Chesapeake Project Impact and Participation	count of courses	115	151	164	185	FY	
LEAF Outreach Team Impact	students reached	332	1,186	3,443	1,122	FΥ	
· · · · · · · · · · · · · · · · · · ·							
LOCAL AND GLOBAL IMPACT							
Office Paper Purchasing	reams	119,617	109,194	110,932	92,982	FY	
Green Cleaning Product Purchasing	percent of budget	tracked by	department	76%	77%	FY	
Sustainable Food in Dining Halls	percent of budget	13%	15%	20%	19%	FY	
Partnership for Action Learning in Sustainability							
(PALS)	count of courses	N/A	N/A	29	30	FY	
Sustainable Maryland Certified Municipalities	count	4	12	22	30	FY	
SMART GROWTH							
Shuttle-UM Ridership	millon rides	3,504,492	3,432,895	3,304,212	3,494,518	FY	
Registered Bikes on Campus	count	2,498	3,250	4,434	TBD	FY	
Bikeshare Members	count	0	0	0	433	FY	
On Campus Beds for Students	count	13,185	13,227	13,636	13,408	FY	
Local Off Campus Beds for Students	count	N/A	N/A	4,772	5,568	FY	
UMD-affiliated Apartments for Graduate Students	count	N/A	N/A	476	476	FY	
Undergraduate Students Living on and Near Campus	percent of students	45%	45%	50%	49%	FY	
Certified Green Offices	count	43	37	63	82	FY	
SUSTAINABLE WATER USE							
Campus-wide Water Consumption	kgal	482,987	475,302	540,537	519,473	CY	
Water Consumption per capita	kgal/FTE person	11.3	11.1	12.4	11.8	CY	
Stormwater Management Facilities	count	N/A	N/A	129	110	FY	
WASTE MINIMIZATION							
Institutional Diversion Rate	percent of solid waste	/6%	/8%	89%	83%	CY	
Individual Recycling Rate	percent of solid waste	52%	55%	56%	4/%	CY	
Solid Waste Landfilled	tons	4,106	3,927	3,770	4,174	CY	
Solid Waste Generation*	tons	8,877	10,149	11,502	8,137	CY	
Composted Food Waste	tons	509	647	704	452	CY	
Disposable Water Bottle Savings	equal of leastster	1 41 0 41	F07070	1777 400	2 077 007		
*Not including construction & demolition waste that	was recycled or sod and so	i41,041	507,638	1,/3/,420	2,933,087	Γĭ	

sustainableumd

terps leave small footprints

2016 SUSTAINABILITY REPORT



September 16, 2016

University Sustainability Fund Annual Report: FY2016

Fiscal year 2016 (July 2015–June 2016) was the sixth year of the University Sustainability Fund, which is administered by the Office of Sustainability with oversight and funding authority by the University Sustainability Council. All revenue comes from undergraduate students in the form of a Student Sustainability Fee, which was \$12 per fulltime student per year in FY16 and has been fixed at that rate since FY14. A student-majority Sustainability Fund Review Committee reviews proposals and recommends grant awards to the Sustainability Council. University of Maryland students, faculty, and staff can submit proposals by October 15 (priority deadline) or January 15 (final deadline).

The Student Government Association's Sustainability Committee administered the Sustainability Mini-Grant program for its second year in FY16. The Mini-Grant program is funded by the Sustainability Fund and offers smaller grants (up to \$1000 in FY16) on a shorter timeline than the Sustainability Fund can offer. A summary of Mini-Grant activities is included at the end of this report.

Summary of Sustainability Fund Activities in FY16

Revenue:	\$475,443 (\$310,742 new revenue; \$164,701 FY15 carry-forward)
Number of proposals received:	38
Total funding requested:	\$1,162,365
Number of grants awarded:	20
Total funding awarded:	\$375,953.63
Average award:	\$18,798
Carry-forward to FY17:	\$79,489.46

Summary of Sustainability Fund Activities Since Year 1 (FY11-FY16)

Revenue:	\$1,636,736
Number of proposals received:	212
Total funding requested:	\$5,937,248
Number of grants awarded:	93
Total funding awarded:	\$1,459,820
Average award:	\$15,697

Sustainability Fund Grant Recipients in FY16

Transforming Student Culture through Green Housing

RECIPIENT: Department of Resident Life, Department of Fraternity and Sorority Life, and Office of Sustainability

GRANT: \$112,458

The Department of Resident Life (DRL) and the Department of Fraternity and Sorority Life (DFSL) received a grant that will fund a new staff position housed in the Office of Sustainability to coordinate sustainability initiatives within DRL and DFSL. Specifically, this staff person will create and manage Green Terp and Green Chapter programs, providing sustainability living and learning opportunities for students in campus housing. The grant funds a two-year pilot period for the staff person and the programs.

Anytime Dining: A Residential Dining Transformation

RECIPIENT: Dining Services

GRANT: \$50,000

Dining Services received a grant of \$50,000 to fund a dish conveyor belt in the North Campus Diner. This renovation is part of the department's switch to "anytime dining." In anytime dining, students will have unlimited access to all three residential dining halls (replacing the point-based plans with an all-your-care-to-eat setup), and disposable products will be eliminated from the dining halls. Each year, Dining Services buys and provides 6.2 million disposable products in the dining halls, many of which enter the waste stream as landfill trash. The dish conveyor belt helps facilitate an easy transition to disposable-free dining.

Living Wall in University Libraries

RECIPIENT: University Libraries

GRANT: \$30,000

University Libraries received funding to build a "living wall" in McKeldin Library. Living walls, indoor surfaces covered with live plants, improve indoor air quality and can reduce the need for air conditioning. The McKeldin living wall will be designed by students in the Department of Plant Sciences and Landscape Architecture. With so many people passing through the university's largest library every day, the McKeldin living wall will expose countless people to a new sustainability concept.

MDSE Wellness Way Vegetated Swale

RECIPIENT: Maryland Sustainability Engineering GRANT: \$25,325

A local project team from the student group Maryland Sustainability Engineering was given a grant of \$25,325 to retrofit an existing stormwater management system on Wellness Way. The retrofit will transform a concrete runoff channel to a vegetated swale. The swale will absorb runoff that currently flows directly into Campus Creek, and eventually the Chesapeake Bay. The proposed vegetated swale will be engineered to slow down stormwater by reducing the impervious surface area and placing densely rooted vegetation to absorb water. The introduction vegetation will encourage water uptake through their roots, and the reduction of impervious areas will allow water to infiltrate the soil media. By introducing native plant types and densely rooted vegetation, the swales can further intake water, provide temporary storage, and treat stormwater.

Partnership for Action Learning in Sustainability

RECIPIENT: National Center for Smart Growth

GRANT: \$25,000

The Partnership for Action Learning in Sustainability (PALS) program received a grant to fund their continued sustainability projects in cities and towns across the state of Maryland. PALS is a campus-wide initiative that enlists faculty expertise and student ingenuity to offer fresh solutions to sustainability challenges facing Maryland communities. Administered by the National Center for Smart Growth at UMD, the PALS mission is to provide high-quality, low-cost assistance to local governments while creating an active and valuable real-world learning experience for UMD graduate and undergraduate students.

Sustainability Mini-Grant Requests for Permanent Appropriation from the Sustainability Fund

RECIPIENT: Student Government Association

GRANT: \$20,000

This project provides a permanent, annual allocation from the Sustainability Fund to support the Sustainability Mini-Grant program; it also raises the minimum request for Sustainability Fund grants to \$2,000. The SGA Sustainability Committee, an all-student group, reviews Mini-Grant proposals on a rolling basis and is able to award small grants more quickly than the Sustainability Fund process allows. This change will allow more small grant projects to be quickly reviews and approved, enhancing the opportunity for all members of campus to design and implement their sustainability ideas.

Plug Load Management Pilot Study

RECIPIENT: Facilities Management

GRANT: \$19,000

This project aims to study and refurbish plug load management controls during the HJ Patterson (HJP) Wing 1 renovations. Plug loads include computers, copiers, printers, refrigerators, laundry machines, vending machines, task lights, space heaters, and other electronics. Much of this plug load energy is consumed when users are not utilizing the devices. There are a number of types of controls that could

be utilized (occupancy sensing, load sensing, timed) that may work for different applications; plug load management for existing buildings should be investigated as a potential strategy to reduce our campus carbon footprint. The project includes four components, including: purchasing and installing plug load management controls for 50% of electrical receptacles on fourth floor of HJP; purchasing and installing electrical sub meters at each receptacle electrical panel on the third and fourth floors; conducting a plug load pilot study to determine which types of plug load controls provide the most energy reduction and work best for different users/devices; and performing a cost/benefit analysis to determine if existing buildings should be targeted for plug load management.

How to Increase Commuting by Mass Transit

RECIPIENT: National Center for Smart Growth, Department of Transportation Services, and Office of Sustainability

GRANT: \$19,000

A professor in the National Center for Smart Growth will collaborate with DOTS and the Office of Sustainability on the proposed study to determine effective ways of increasing the number of student, faculty, and staff commuters who choose transit as their primary means of commuting to and from the UMD campus. The results of the study will help the campus respond to its forthcoming parking shortage and further reduce carbon emissions associated with commuting.

Recycling Bins for Greek Life

RECIPIENT: Alpha Omicron Pi and Facilities Management

GRANT: \$17,331

This project seeks to improve recycling behavior for students in the two housed councils, the Panhellenic Association (PHA) and the Interfraternity Council (IFC). The grant will provide one standard recycling bin for each of the 65 satellite houses and two standard and two fire-rated bins for each of the 33 chapter houses. This project was developed by the Greek Sustainability Team, a student group which was formed in September 2015 by two PHA sorority members. The team includes 19 members of Greek life, many of whom are the Sustainability Chairpersons for their chapters. The group's conversations frequently return to recycling, a persisting problem in houses and at Greek events.

Employing Wind Power Harnessing Technologies

RECIPIENT: Department of Mechanical Engineering

GRANT: \$14,200

Dr. Navid Goudarzi in the Mechanical Engineering Department will lead this project to study the potential for installing micro wind turbines at Maryland Stadium. The project will conclude with determining the locations with the best wind energy density, the optimal turbine designs, and the most economically-efficient ways to harness this power. Increased use of renewable energy on campus, such as with micro wind turbines, helps reduce the university's carbon footprint and promotes greater

visibility for renewable energy overall. Inter-Collegiate Athletics has approved the study. The research will also provide insight into the possibility of installing micro wind turbines on other tall buildings on the UMD campus.

Using Red Clover to Reduce Greenhouse Gas and Increase Pollinator Services

RECIPIENT: Department of Entomology

GRANT: \$11,000

Researchers in Entomology will conduct field studies during two separate growing seasons to evaluate the use of red clover to reduce GHG emissions and enhance the number, diversity, and effectiveness of pollinators. The research will be done at the at UMD Upper Marlboro Facility, a research and education center used by UMD Extension and the Department of Agriculture and Natural Resources. Due to Extension's educational mission, one outcome of this research is the potential to share conclusions with state farmers and gardeners, widening the environmental reach of the study.

Off-Grid Small Scale Wind Turbine

RECIPIENT: Department of Aerospace Engineering

GRANT: \$9,000

The Wind TERPines student group received a grant to developing a 0.5m diameter turbine, as well as creating actionable plans for the marketing and deployment of a turbine that serves a real-world application. The turbine construction is for the Department of Energy's 2016 Collegiate Wind Competition, but the team is looking to extend its competition efforts to make an on-campus impact. The turbine will be displayed near the manufacturing building during deployment to introduce the campus to wind energy. It would also serve as a teaching tool for future students in ENAE788I: Wind Energy Theory, and ENAE481, a senior aerospace design class.

Trash: The Problem of Waste in Our Lives and World, A Scholars Theme for 2015-16

RECIPIENT: College Park Scholars

GRANT: \$7,500

Trash: The Problem of Waste in Our Lives and World is a project of education and outreach being undertaken this academic year in College Park Scholars. It is a theme giving shape and focus to curricular and co-curricular activities in and across the 12 living-learning programs that comprise Scholars.

Trash is also an issue that connects powerfully with the living part of Scholars as a living-learning community, providing great opportunities for students to put their knowledge into action in their residence halls and classrooms. Events include speakers, panels, and book discussions. Public Leadership Scholars will complete environmental service activities, and Environment, Technology, and Economy Scholars will create an app designed to educate students on the waste stream.

Rooftop Garden on South Campus Dining Hall

RECIPIENT: Cluster for Sustainability in the Built Environment at the University of Maryland and the Department of Mechanical Engineering

GRANT: \$6,197

This project aims to revitalize and augment existing infrastructure for food production on the roof of South Campus Dining Hall building. The augmentation will involve construction of a dozen raised beds for food production as well as a greenhouse facility to support production of plants. Faculty from three different colleges are collaborating in an effort not only to revitalize the existing infrastructure, but also to outline a joint sustainable vision that includes both continuous educational and research activities. This study has been incorporated into a technical elective course for undergraduate students in mechanical engineering. two undergraduate students will assist Dr. Jelena Srebric in designing and conducting the study. The two students will be reaching out to student groups to encourage participation in planting, cultivating, and harvesting organic produce, during and after the duration of the independent study. Moving forward, they will be actively connecting student organizations, professors and courses to the green roof and the educational potentials it provides.

Increasing Campus Bicycle Parking

RECIPIENT: Department of Transportation Services

GRANT: \$5,823

Department of Transportation Services (DOTS) proposes to install 10 new bike racks to provide new parking for 80 bikes at McKeldin Library, Kim Engineering, Chemistry Library, and the UMD Golf Course. The grant covers the full cost of the racks including shipping. DOTS will cover installation labor.

Clarice Water Filling Station Project

RECIPIENT: The Clarice Smith Performing Arts Center

GRANT: \$5,000

The Clarice Smith Performing Arts Center received \$5,000 from the Sustainability Fund to install four filtered water filling stations in the various wings of the building. Currently, The Clarice has one water station closest to the School of Music. With thousands of students, artists and patrons who come to The Clarice each year, there is a strong demand for additional water stations throughout the building and a desire to decrease the amount of waste created by single-use water bottles.

Gemstone Team BREATHE

RECIPIENT: Team BREATHE GRANT: \$5,000 Team BREATHE is an undergraduate team of eight students are investigating the potential of bio-walls to filter volatile organic compounds (VOCs) from indoor air. Phase one of the team's research will look at the presence of microbial communities on the roots of plants on the bio-wall. A particular genus of bacteria, Hyphomicrobium, has been found to increase in concentration when exposed to VOCs, indicating the ability to biologically filter the VOCs. The second phase will involve redesigning a passive bio-wall system to improve its air filtration abilities. Ultimately, the team hopes to find a new way to improve indoor air quality in an environmentally-sound way.

Shower Meters to Reduce Water Consumption

RECIPIENT: College Park Scholars, Environment, Technology, and Economy

GRANT: \$4,260

Team Shower Power, a group of students in the Environment, Technology, and Economy College Park Scholars program, received a grant to install shower meters in the residential hall bathrooms. The meters will collect data on student water consumption. The data will then be used to structure an educational initiative that will utilize the shower meters to actively encourage water conservation in dorm showers. By using on-site water detection and information distribution, this strategy will not only educate students on the importance of water conservation, but will also make them more aware of their own water consumption. Thus, the combination of shower meters and an informational campaign will increase the chances that campus residents will reduce their overall water consumption.

Modeling Organic Landscape Practices on Campus Lawns

RECIPIENT: Student Sustainability Committee

GRANT: \$4,228

The Student Sustainability Committee seeks to compare current traditional lawn treatment and organic alternatives in an experimental study. One patch of lawn will be set aside for the existing landscape treatment used by Facilities Management. A second patch will receive an organic treatment that is already used on the Clarice Smith Performing Arts Center's lawn. Finally, a third patch will be treated with synthetic-free, organic methods. The project ultimately seeks a financially feasible and environmentally responsible model for landscape treatment on campus.

Solar Umbrellas for the Outdoor Aquatic Center

RECIPIENT: University Recreation and Wellness

GRANT: \$4,000

University Recreation and Wellness will install 15 solar paneled umbrellas at the Outdoor Aquatic Center. The solar panels on power USB chargers for up to 3 devices, and work independent from any power source. They create 54 Watts of electricity, and the unit is fully charged with 5.5 hours of sunlight. In addition to sustainability, the umbrellas are a great way to promote skin safety and skin cancer awareness on the pool deck as part of a greater focus on total wellness.

Nanopaper Applications to Universalize Renewable Electronics

RECIPIENT: Team Nature, Gemstone Program

GRANT: \$1,631

As part of the Gemstone Honors Program, Team Nature hopes to combat society's dependence on plastics by exploring the use of cellulose nanopaper (CNP) as a potential alternative. CNP is a much more sustainable option because cellulose is naturally abundant, biodegradable, versatile, and inexpensive. CNP has demonstrated promise as a replacement for plastics in devices, such as solar cells and smartphone touchscreens because of its comparable properties to plastics. Under the guidance of Dr. Liangbing Hu of the University of Maryland Energy Research Center, Team Nature is researching methods of improving the properties of CNP so that the material may become more appealing as a mainstream alternative to plastics in electronic applications. The University Sustainability Fund will help fund that research.

Sustainability Mini-Grant Recipients in FY16

Number of Mini-Grants Awarded:	14
Total Funds Awarded:	\$6,919.42
Carry-forward to FY17:	\$3,080.58

The 251 North Pollinator Garden

Organization/ Individual: Linette Floyd

Grant: \$1000

University of Maryland Dinning Services is looking to install a pollinator garden to reclaim an underused plot of land behind 251 North. We plan to install the 251 North Pollinator Garden with the help of students volunteers, according to plans developed by Guy Kilpatric, Terp Farm's Lead Agricultural Technician. This garden planting will be part of a larger campus-wide Earth Day celebration that will engage students in volunteer works across many campus garden spaces. Once established, the 251 North Pollinator Garden will support pollinators that benefit our ecosystem here in College Park, with specific benefits to campus vegetable gardens and the UMD Apiary (honeybees on top of the 251 North Dining Hall).

Hybrid Cars

Organization/ Individual: Dain Golsen

Grant: \$917.92

Most hybrid cars are front-wheel drive sedans, so as consumers who prefer all-wheel drive or rear wheel drive vehicles, such as SUVS, hatchbacks, coupes, and sedans, hybrids are not a viable option. However, rear-wheel and all-wheel drive vehicles contain a drive shaft as a crucial part of their power-distribution system, and it is possible to harness the wasted energy that is produced by the drive shaft when the car is braking, in a process called regenerative braking. By harnessing the energy from the drive shaft on a rear wheel or all-wheel drive car, an area where energy is wasted can be converted into electrical energy. If the research group can design a system that can reuse the wasted energy from the drive shaft and convert it into electrical energy, the research group will create a more diverse hybrid.

'Impacts of Global Change' Team Poster Project

Grant: \$765

Within the course CPSG101 Science & Global Change Freshman Colloquium II students are examining the causes and impacts of global change on human society and the living & non-living environment around us. As part of this, 18 teams of 4 students each are developing posters about specific impacts that present and near-future changes will produce (such as ocean acidification; spread of communicable diseases; availability of potable water; impacts on specific regions; sea level rise and its impact on infrastructure; etc.) The money would be used to cover the cost of printing posters (18 posters at \$42.50 each, printed at the ENGR Copy Center).

Divestapalooza

Organization/ Individual: SGA SSC

Grant: \$674.30

On March 23rd SGA's Student Sustainability Committee hosted Divestapalooza, an event to raise awareness and support for efforts to Divest the USM's endowments from the fossil fuel industry. We will host 4 UMD musical groups and 1 guest speaker, and will have engaging activities with a sustainability focus that will be fun for attendees and will help raise support for the issue. The money requested will be used to pay for t-shirts for the event to promote outreach and spread the message to greater audiences.

Green Squad Challenge

Organization/ Individual: Chelsea Brown

Grant: \$600

The Green Squad Challenge (GSC) is a series of sustainable pledges that University of Maryland North Campus residents can take to reduce their environmental impacts and earn points to win eco-friendly prizes. Because the GSC lasts from August until April, we would use the reusable tote bags that we are requesting through the Mini Grant, as a mid-way prize to maintain momentum. The goal of the GSC is to encourage students to start thinking and behaving in more sustainable ways to reduce their carbon footprints. These tote bags will reduce the number of disposable bags being used, change how students think about their environmental impact, and encourage students to take the GSC.

From Gloves to Benches: Keeping Laboratory Glove Waste Out of Landfills

Organization/ Individual: Alterra Sanchez

Grant: \$506

Several environmental engineering students reuse disposable gloves to prevent waste despite being advised not to do so for safety reasons. Once a recycling program is introduced in the laboratories and a more sustainable choice of disposable gloves is available, students will be encouraged not to reuse disposable gloves and choose the appropriate glove thickness needed for their personal safety. This project will prevent over 370 pounds of non-biodegradable waste from entering landfills per year, thus lowering the university's overall waste contribution and making the environmental engineering laboratories a leader within UMD in laboratory sustainability.

Majora Carter Lecture

Organization/ Individual: Marilee Lindemann

Grant: \$500

College Park Scholars has a program-wide theme this year of Trash: The Problem of Waste in Our Lives and World aimed at raising consciousness and changing behavior among students, staff, and faculty in our living-learning community. Majora Carter will be the lead-off speaker in a series of lectures called "Trash Talks." She will speak on September 30 in the Colony Ballroom on the subject of "Home(town) Security." A MacArthur and Peabody Award-winning urban revitalization strategist, Majora Carter has a powerful message about how a cleaner, greener infrastructure can help move people out of poverty.

Introduction to Climate Change Solutions

Organization/ Individual: Seth Miller

Grant: \$402

Students enrolled in The Coastal Ocean (GEOG 441) will be taken to the Smithsonian Environmental Research Center in Edgewater, MD to learn about the climate change research that is conducted there and to tour the LEED Platinum-certified laboratory building to see energy efficiency solutions in action.

Confronting Globalization

Organization/ Individual: Virginia Haufler

Grant: \$300

"Confronting Globalization" is an online simulation platform designed to engage students with the political, social, economic and environmental challenges of globalization. The ICONS system was developed here at the University of Maryland.

In this project, students form groups representing different countries, research the policy positions of each country, and of specific interest groups and leaders within the country. They communicate online via ICONSnet, and on the final day of the simulation, we meet for a face-to-face negotiation. One of the main issues they have to address concerns the ecological sustainability of processes of globalization. I use this simulation in BSGC101 "Globalization" which has 75 students per year.

Field Trip to WaterShed Sustainability Center

Organization/ Individual: Kaye Brubaker

Grant: \$300

Bus trip to PEPCO's WaterShed Sustainability Center, an "interactive educational experience" built around the University of Maryland's 2011 Solar Decathlon champion house, WaterShed. The trip will be open to interested students, with priority given to those in my ENCE 100 class.

Alternative Breaks

Organization/ Individual: Alternative Breaks

Grant: \$300

The University of Maryland Alternative Breaks program engages individuals in short-term servicelearning experiences that challenge social, political and economic structures of our global community. The Florida group will be going to Blue Springs State Park. This park is a designated manatee refuge and home to various endangered plants and animals. In order to educate ourselves about the issues facing state parks and the surrounding communities, we will be working as volunteers for the State Park in various capacities that could include building a trail, assisting with re-planting, invasive species removal and/or other projects.

DFSL Alternative Break Weekend

Organization/ Individual: Department of Fraternity & Sorority Life

Grant: \$330

The Department of Fraternity & Sorority Life (DFSL) is partnering with the Leadership & Community Service-Learning unit (LCSL) to host the first annual Greek Alternative Break Weekend on Friday, April 1st through Sunday, April 3rd. Greek Terps started triple sorting (landfill, recycle and compost) in all the chapter houses at the beginning of the Fall 2015 semester. While the infrastructure is now in place, Greek students still struggle to connect why triple sorting is important to sustainability. Therefore, DFSL and LCSL will take 16 (or less) upcoming Greek student leaders, from different chapters, to Clagett Farm to spend 12 hours volunteering on the farm and additional hours learning about sustainability. The Clagett Farm is part of the Chesapeake Bay Foundation and a long-time partner of LCSL. The volunteer portion will include planting trees in the nursery, prepping crop fields and tending to the greenhouses. There will be reflection exercises focused on practical sustainable solutions and pertinent challenges each night of the trip.

Composting Workshop (and Get your Composting Bin!)

Organization/ Individual: Sara Thompson

Grant: \$209.40

As part of the Art and Learning Center's Free Wednesday Workshop Series, we are offering a Composting Workshop for the university community for our April workshop, to tie in with Earth Day celebrations. For this program, participants will come get a lesson on composting delivered by Dan Wray, the Assistant Director of Stamp Facilities and composter extraordinaire, and then receive a kitchen-sized compost pail to decorate and take home with them.

Enabling Composting in Alpha Omicron Pi

Organization/ Individual: Catherine Liebowitz

Grant: \$114.80

This project will benefit students by educating them on how to separate waste into recycle, compost and landfill and by forcing students to think about the food and waste cycle. Additionally, by implementing a composting system alongside our recycling and landfill collection, AOII will teach future generations how to live more sustainably during and after college.