



Sustainability Report

SEPTEMBER 2017

W&M
SUSTAINABILITY

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Acknowledgements

Letter from the Director



As an institution established in 1693, longevity is a familiar concept to William & Mary. In 2008, we took a significant step in the field of modern sustainability when a grassroots student initiative resulted in the creation of the student Green Fee, and subsequently, the Committee on

Sustainability. Since then, progress has continued through student, faculty and staff Green Fee projects, the creation of the director's role I am so fortunate to serve in, and the many initiatives championed by departments, offices and individuals, that have shaped the sustainability landscape of our institution.

The data in this report is a reflection of the first time W&M has applied for an AASHE STARS rating, a process that takes over a year to complete due to the complexity and detail of data required. Far from doing this alone, it was with the enthusiastic help of students, faculty and staff that the data

was provided and collected. Through this long process, I was heartened and very appreciative of the volunteerism, patience and kindness that so many colleagues demonstrated. This is truly One Tribe.

To be awarded with STARS silver in our first year is a solid place to begin, and we find ourselves in good company with universities across the country and world. This allows us to benchmark against our peers, but more importantly, we can better understand in what areas we excel, and find creative solutions to those that could use improvement.

If, while reading this report, you think of ways for W&M to continue progress toward a sustainable university and world, please share this with us at sustain@wm.edu. We are always looking for feedback, suggestions, and sustainability champions.

Appreciatively,

Calandra Waters Lake
Director of Sustainability

Thank you to the many who contributed towards the STARS submission and this report, especially the following:

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About the Report

WHAT IS SUSTAINABILITY?

AASHE defines sustainability in a pluralistic and inclusive way, encompassing human and ecological health, social justice, secure livelihoods, and a better world for all generations.

William & Mary has been making progress in the field of sustainability for many years. This report provides an indepth snapshot that allows us to better understand that progress using a well recognized platform among institutions of higher education.

The STARS platform is a transparent, self-reporting framework for institutions to measure their sustainability performance. Through STARS, institutions create common sustainability data sets in order to inform decisions, benchmark against peers, and gain inspiration from what others aspire to, or have, accomplished. STARS is hosted by the Association for the Advancement of Sustainability in Higher Education (AASHE), an internationally recognized higher education organization. W&M has been a member of AASHE since 2010, which provides free membership to all faculty, students and staff.



William & Mary earned a silver rating for our 2016 submission.

The following report showcases data collected for the 2016 STARS submission, the majority of which spans the three previous years, across four areas: academics, engagement, operations, and planning & administration. In addition to the points earned versus possible per category, you will find highlights from the data, and recommendations on ways to improve based off STARS criteria. A graphic key has been used within the report for convenience. We did not pursue some categories due to data restraints. If you would like more information on our submission, it is publicly available at stars.aashe.org/institutions/college-of-william-mary-va/report/2016-12-20.

Definitions and language for this report are sourced from our submission and the AASHE STARS platform.

Look for the following color-coded symbols throughout the report, comparing our scores to those of other silver-rated universities:

AHEAD	AVERAGE	NEEDS WORK	NO DATA AVAILABLE
			N/A

Summary of Results

CATEGORY	POINTS EARNED / POINTS POSSIBLE
 Academics	29.61 / 58
 Curriculum	16.36 / 40
 Research	13.25 / 18
 Engagement	20.37 / 41
 Campus Engagement	11.25 / 21
 Community Engagement	9.12 / 20
 Operations	25.57 / 81
 Air & Climate	2 / 11
 Buildings	0.65 / 8
 Energy	2.44 / 10
 Food & Dining	2.16 / 8
 Grounds	2 / 4
 Purchasing	3.32 / 6
 Transportation	3.52 / 7
 Waste	3.89 / 10
 Water	5.59 / 7
 Planning & Administration	15.08 / 32
 Coordination & Planning	2.5 / 8
 Diversity & Affordability	9.06 / 10
 Investment	0.12 / 7
 Wellbeing & Work	3.4 / 7

Summary of Results



*Subcategories
where W&M
excelled*

ENGAGEMENT

Student & Employee Orientation
Community Service
Trademark Licensing

OPERATIONS

Sustainable Dining
Biodiversity
Sustainable Procurement
Electronics Purchasing
Student Commute
Sustainable Transportation
Water Use

PLANNING & ADMINISTRATION

Assessing Diversity & Equity
Affordability & Access
Assessing Employee Satisfaction



*Subcategories
where more
work is needed*

ACADEMICS

Learning Outcomes
Graduate Program
Incentives for Developing Courses
Open Access to Research

ENGAGEMENT

Student Educators Program
Employee Educators Program
Staff Professional Development
Community Partnerships
Continuing Education
Participation in Public Policy

OPERATIONS

Greenhouse Gas Emissions
Building Design & Construction
Landscape Management

PLANNING & ADMINISTRATION

Sustainability Planning
Employee Compensation
Participatory Governance

The collection of our AASHE STARS data revealed that we excelled in some areas of sustainability and still have progress to be made in others. Compared to other silver rated institutions we are very advanced in our purchasing policies, water reduction efforts, and diversity and affordability efforts.

W&M scored well in purchasing due to our sustainability procurement policies for food services, cleaning chemicals, garments and transportation, as well as the majority of our IT product purchasing being EPEAT certified gold. We have reduced our water consumption by 39% through Green Fee granted low-flow fixtures, but even more significantly through Facilities Management's efficiency efforts. Our diversity and affordability scores showcased the President appointed Task Force on Race and Race Relations as well as a robust system for recruiting students from underrepresented groups and supporting students, faculty and staff of these communities.

Categories that scored below our silver-rated peers include air and climate, buildings, and coordination and planning. W&M has progress to be made in addressing our greenhouse gas emissions, as well as the amount of new construction that is sustainably certified. Although community feedback on university governance has an informal route, points were lost due the non-existence of a formal shared governance body. Additional points were lost due to a need for SMART goals within our campus planning documents.

Although a majority of the categories display an average rating compared to our silver rated peers, some of these had a balance of high and low subcategories, while others were consistently average. Further details can be found within the report.

Receiving a silver rating on our first STARS submission is a good place to begin. The data collection process is extremely time-intensive on the first submission and revealed much about W&M. Compared to other silver institutions, there are areas in which we excel, areas where we can make progress, but also areas where we were unable to claim points due to formalities or documentation that is needed. W&M will continue to make progress in sustainability, hastened by benefit of data provided by platforms such as STARS, and we look forward to our next STARS rating in 2019.

Academics

Sustainability in academics is measured by the number of sustainability courses, degrees, and programs offered, and experiences and research conducted in this field. Sustainability in curriculum and research help prepare students to apply these principles in the professional field and build a broader understanding of the topic.

William & Mary offers many sustainability courses spread through 82% of departments, ranging from early courses to capstone projects. Undergraduate degrees focused on sustainability can also be found with the Environmental Science & Policy Program and a concentration in sustainability for business majors.

Beyond traditional classwork, there are multiple opportunities to conduct research or intern in a sustainability field, utilizing the campus as a living laboratory. These projects often involve both faculty and staff, helping to propel sustainability forward at W&M while simultaneously providing students valuable hands-on experience. Students, faculty and staff can receive funding for sustainability research through the Green Fee.

► Sustainability Spotlight SEA TURTLE MORTALITY RESEARCH



Each year, hundreds of sea turtles wash up dead (strand) on Chesapeake Bay coastlines, a major concern for the long-term persistence of marine turtle populations. Research was conducted to identify potential locations of sea turtle mortality in the Bay to narrow down focus areas for management. After death, sea turtle carcasses act as drifting objects, moving with currents and winds until making landfall. With the help of a

William & Mary undergraduate student, field experiments were carried out to better parameterize how a sea turtle carcass drifts. These parameters were then used to develop an oceanographic drift model predicting the trajectories of turtles from location of at-sea mortality to stranding site, identifying likely hotspots of sea turtle mortality in the Bay. A better understanding of where turtle mortality occurs will guide conservation efforts and aid in the recovery of Virginia's sea turtle populations.

Above: Bianca Santos, SMS '17 and Carrie Adams '17 taking standard measurements of a sea turtle carcass.





AVERAGE

Points Earned / Points Possible

29.61 / 58 (Curriculum: 16.36 / 40, Research: 13.25 / 18)

Points by Category

Category	Points Earned / Points Possible	Description
CURRICULUM	Academic Courses 7.76 / 14	We offer 45 sustainability focused courses and 180 courses that include sustainability in the course material.
	Learning Outcomes 0 / 8	Our data collection could not find any specific learning objectives related to sustainability, although some program overviews state sustainability-related focuses.
	Undergraduate Program 3 / 3	Sustainability focused undergraduate programs include Environmental Science and Policy, both as a major and minor, as well as a concentration in sustainability for business majors.
	Graduate Program 0 / 3	There are currently no graduate programs focused on sustainability.
	Immersive Experience 2 / 2	The Office of Community Engagement provides immersive experiences through their Branch Out program, as well as the Reves Center through their study abroad program.
	Sustainability Literacy 0 / 4	There is not currently a literacy assessment in place to measure students' understanding of sustainability.
	Incentives for Developing Courses 0 / 2	There are currently no specific incentives for faculty to include sustainability in courses.
	Campus as a Living Laboratory 3.6 / 4	The Committee on Sustainability, EcoAmbassador Internship Program, Office of Sustainability, Dining Services, Environmental Science & Policy Program, Biology Department and more use the campus to conduct research.
RESEARCH	Research and Scholarship 10.25 / 12	Of the research conducted through Sponsored Programs, 20.7% of those faculty worked on sustainability related projects, representing 53% of those departments.
	Support for Research 3 / 4	Support for research is provided through programs like the student Green Fee and W. Taylor Reveley III Interdisciplinary Fellows as well as Swem Library's research guide, showcases and initiatives.
	Open Access to Research 0 / 2	Although there is no formal open access policy, voluntary submissions are encouraged and there are mandatory structures in place for student work from some departments.

Recommendations

- Increase the number of sustainability course offerings. Currently 5.7% of courses are inclusive of, or related to, sustainability.
- Construct learning outcomes that include clear lines to sustainability objectives.
- Continue support of existing undergraduate sustainability programs and foster additional programs, particularly in the graduate departments.
- Continue support of immersive experiences and research or projects that take advantage of the campus as a living laboratory.
- Implement a literacy exam to ascertain the sustainability knowledge of incoming student, with a matching exiting exam to graduates.
- Provide faculty tenure and promotion incentives for developing sustainability courses.
- Create a requirement that students take at least one sustainability course prior to graduating.
- Implement a formal open access policy to create a repository of faculty, staff and student research.



Campus & Community Engagement

Campus and community engagement reflects efforts to provide students with sustainability learning outside the classroom as well as faculty and staff training and development opportunities.

First Year Experience, in collaboration with Community Engagement, sets expectations early through volunteer activities embedded in the program. A plethora of engagement and education opportunities are available through the many sustainability related student organizations, internships, and leadership and committee positions, many available through the Committee on Sustainability and open to students, faculty and staff.

This category also recognizes engagement within the community, leading towards a more sustainable society while providing valuable experience. W&M has had a long history of student, faculty and staff engagement, in both the on-campus and local community. It is often referred to as a family and this is truly reflected in the high number of students that demonstrate their philanthropy through volunteering their time to help others. The Office of Community Engagement has led the charge on many social sustainability projects and programs, while others have made positive impacts through organizations or individual action.

▶ Sustainability Spotlight EARTH WEEK



Earth Week is seven fun-filled days of sustainability activities, coordinated by the Committee on Sustainability, open to faculty, students, staff and the local community. The annual family friendly Earth Day Festival caps off the week, where campus and community groups,

along with sustainable vendors, table while attendees enjoy live music and local food. The 2017 festival, Monarchs and Music, featured live butterfly tents, tours of the campus greenhouse, over 50 booths, mini-talks with monarch expert, Lincoln Brower, and the annual reading of *The Lorax* by W&M President, Taylor Reveley.

▶ Sustainability Spotlight STUDENT GREEN FEE

The Green Fee, created in 2008 through a grassroots student initiative, funds sustainability projects proposed by the campus community and is managed by the Committee on Sustainability (COS), consisting of students, faculty and staff. A portion of all tuition goes towards the Green Fee to further sustainability on the campus, and through the university. Over \$1 million in projects have been funded to date, ranging from cost-saving LED retrofits to wellness research to outreach opportunities through the biodiesel Tribe Truck Farm. COS advertises a call for proposals every fall and spring semester, open to all students, faculty and staff.





Points Earned / Points Possible

20.37 / 41 (Campus Engagement: 11.25 / 21, Community Engagement: 9.12 / 20)

Campus Engagement Points By Category

	Student Educators Program	0 / 4	We do not currently have a peer-to-peer educator program that includes training as well as required outreach.
	Student Orientation	2 / 2	100% of first year, transfer, and graduate students participate in orientation programming that include sustainability, and have the option of attending the introductory fair, Meet the Greens.
	Student Life	2 / 2	We have over 25 student inclusive groups and committees related to sustainability, CSA with KelRae Farm, student run enterprise in DormMania, sustainable investment and finance experience through the Green to Gold Fund Committee and the Committee on Sustainability, multiple sustainability events and cultural arts experiences, Leave No Trace training through the Tribe Adventure Program, and sustainability student employment opportunities.
	Outreach Materials and Publications	2 / 2	Sustainability outreach travels through the website, listserv, social media, W&M articles, and guides.
	Outreach Campaigns	4 / 4	Multiple outreach campaigns included Seize the Grid and Take Back the Tap's Tap-a-palooza, winning the campus a free bottle filling station.
	Assessing Sustainability Culture	0.25 / 1	A sustainability culture assessment was conducted, revealing strengths and informing improvements to the program.
	Employee Educators Program	0 / 3	There is currently no sustainability employee educator program in place.
	Employee Orientation	1 / 1	100% of new employees are offered orientation guidance materials that cover sustainability topics.
	Staff Professional Development	0 / 2	There is currently no current sustainability professional development and training being offered every year.

Recommendations

Additional education through professional development and peer-to-peer educator programs for students and faculty/staff, whether that be a new program or part of an existing one.

- Continue clear integration of sustainability into orientation operations and programming.
- Continue support of student, faculty, staff groups and collaboration, perhaps through greater partnerships with Student Affairs.
- Clearer messaging about initiatives, the nature of sustainability and its connection to all.



Community Engagement Points By Category

	Community Partnerships	0 / 3	We do not currently have a formal community body focused on sustainability, although the Community Engagement Advisory Committee does sometimes discuss sustainability.
	Inter-Campus Collaboration	3 / 3	We partnered with Virginia institutions on the Power Dialog and the Tribe Truck Farm received an honorable mention from AASHE, of which we are a member.
	Continuing Education	0 / 5	We do not currently offer continuing education courses to the community, although we have taught a Christopher Wren Association course.
	Community Service	4.12 / 5	70.5% of W&M undergraduates participated in community service, totaling over 250,000 hours between 2015-2016.
	Participation in Public Policy	0 / 2	Our data collection could not find participation in public policy that met this requirement.
	Trademark Licensing	2 / 2	W&M is an affiliate member of the Worker Rights Consortium (WRC) which is a non-profit organization created by university administration, students and labor rights experts, whose purpose is to assist in the enforcement of manufacturing Codes of Conduct.

Recommendations

- More structured and long term sustainability specific collaboration with the local community.
- The integration of continuing education courses through W&M.
- Continue support for community service outlets, like the Office of Community Engagement
- Back sustainability policies at the local, state, national and international level.



Operations

Sustainability is inclusive of many factors, one of the most basic being environmental. W&M has been addressing these challenges for many years through Facilities Management projects, but progress was spearheaded in 2008 with the creation of the student Green Fee and Committee on Sustainability.

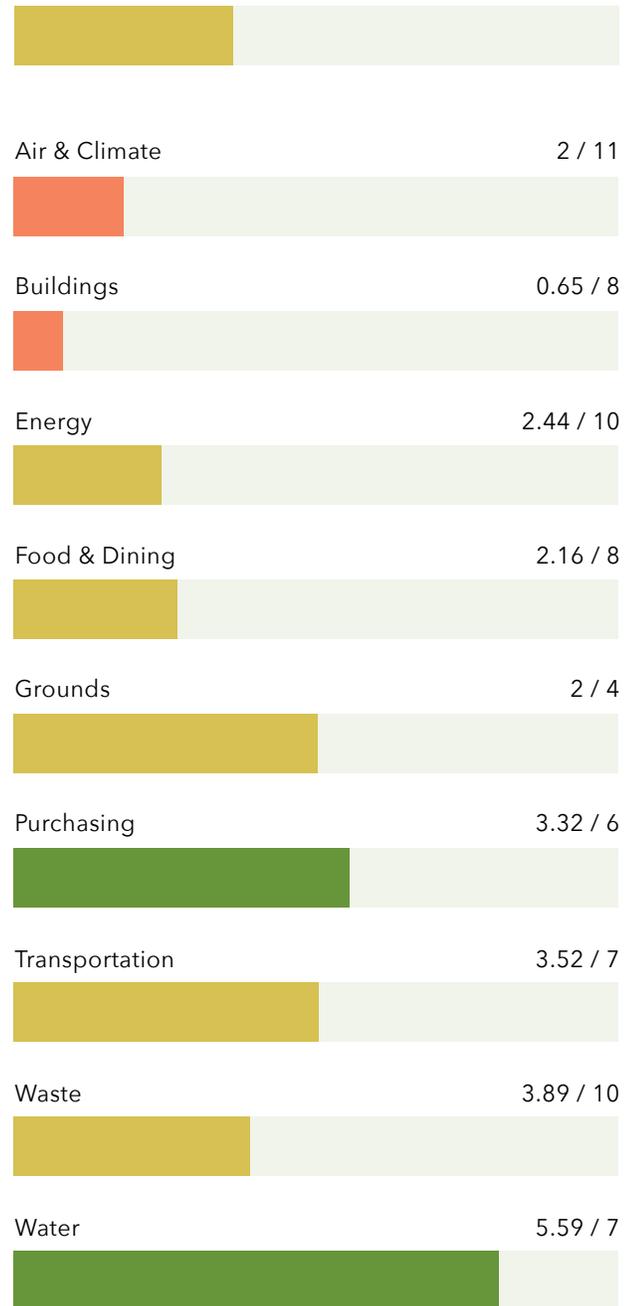
The Green Fee has funded significant environmental progress through initiatives like water reducing fixtures and LED retrofits. W&M has increased its number of LEED certified buildings on campus, and although we have more buildings, our energy use has decreased over a ten year period.

Large strides are also being made through the Green to Gold Fund, a new green revolving account, which provides loans to campus projects that reduce greenhouse gas emissions or resource use, while producing cost savings. The first project enabled through this fund was a LED retrofit of the entire parking deck, reducing energy use by 70%, producing 33% more light and paying back the project loan in 3 years.

These projects nicely compliment additional actions, such as the Energy and Water Use Policy that is making wiser use of our physical plant systems based off of building occupancy and time of day.

There is, of course, still plenty of progress to be made, and the following sections break down where we currently stand with suggestions based off of STARS criteria.

Overall Rating 25.57 / 71





Points Earned / Points Possible

2 / 11

W&M conducts an annual greenhouse gas (ghg) audit with the help of involved undergraduate students and faculty. These audits consistently reveal that our largest contribution towards ghg emissions is our purchase of electricity, followed by on-campus sources of emissions, such as burned fuels.

Outdoor air quality is monitored through tracking of emissions on campus. Consideration of these emissions are taken into account, this is demonstrated through staff instructed not to let equipment and vehicles idle unnecessarily.

Points By Category

 Greenhouse Gas Emissions	1.5 / 10
 Outdoor Air Quality	0.5 / 1

Recommendations

- Our largest source of greenhouse gas emissions is through electricity use. Sourcing grid-scale renewable energy for the campus could be the single largest step towards reducing our emissions.
- More written policies that solidify what is already done, such as no-idling equipment and vehicles, both for the W&M community and visitors.
- Exploration of carbon offsets.



Points Earned / Points Possible

.65 / 8

The majority of buildings on campus operate under a green cleaning program that emphasizes environmentally friendly products and chemicals. Building operations also function under the Energy and Water Use Policy (2017) which takes into account building occupancy and time of day.

Facilities Management builds in accordance with their technical standards, which require that the Leadership in Energy and Environmental Design (LEED) process be applied to achieve a level of LEED Silver on all buildings, although official purchase of the LEED recognition is not required. According to LEED, these building requirements influence the design, construction, and maintenance of buildings to provide a safe and healthy workspace while minimizing impact on land, air, and water.

Multiple buildings on campus are LEED certified Silver or Gold, such as the Mason School of Business, the School of Education, and the Campus Recreation Center. Recent certifications include Tucker Hall and the fraternity chapter houses, with more on the horizon.

Points By Category

 Building Operations and Maintenance	.25 / 5
 Building Design and Construction	0.4 / 3

Recommendations

- Run existing buildings under a LEED Operations and Maintenance system.
- Although we have many LEED certified buildings, only 16% of construction in the last 5 years has been LEED certified.
- Exploration into the Living Building Challenge, and the training of staff, or hiring of consultants, in sustainable practices and design.



AVERAGE

Points Earned / Points Possible

2.44 / 10

Although the W&M campus has grown over a 10 year period, our energy consumption has declined due to efficiency measures. Though we are routinely implementing energy reducing technology, our energy sources remain the same, a mix of mainly nuclear, coal, and natural gas. On campus solar array options were explored and a feasibility study conducted by a third party in 2016, but revealed that our beautiful tree laced campus had few economically feasible opportunities for solar. Additional efforts are going towards exploring options for grid-scale renewable energy.

Points By Category

-  Building Energy Consumption
2.44 / 6
-  Clean and Renewable Energy
0 / 4

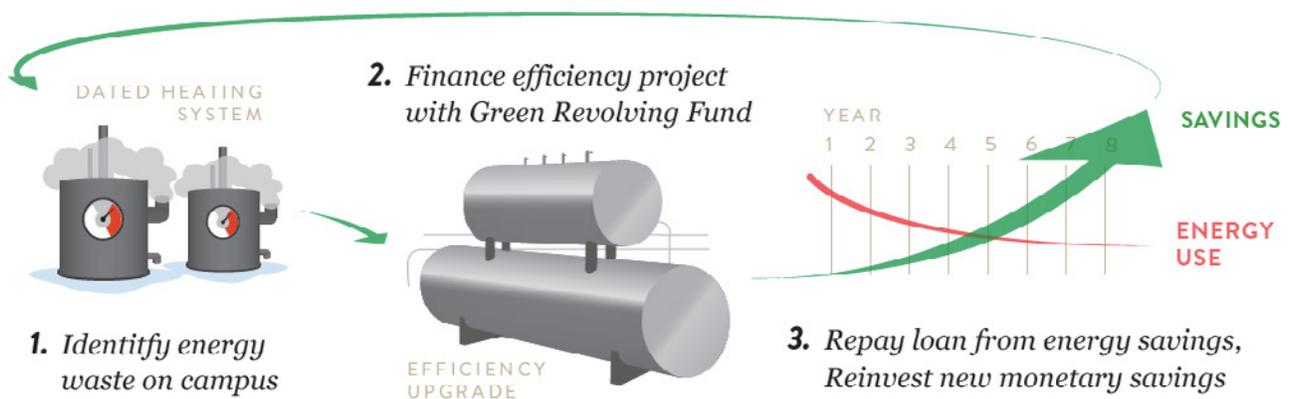
Recommendations

- Source renewable energy on a large scale.
- Install additional meters so energy use can be tracked granularly and additional efficiency projects identified.
- Implement behavioral campaigns to reduce energy use.

Sustainability Spotlight

GREEN REVOLVING FUND

Established in 2016, the Green to Gold Fund is our first green revolving fund. Seeded by the Green Fee, the Green to Gold Fund provides loans to departments and offices for large-scale campus projects that are cost-saving and reduce greenhouse gas emissions or resource use. The pilot award, an LED retrofit of the parking deck lights, will reduce energy use by 72%, save W&M \$17,000 annually, and repay the investment in 3 years. The Green to Gold Fund Committee is composed of students, faculty and staff and when funds are available, accepts proposals spring semesters.



Source: Association for the Advancement of Sustainability in Higher Education



AVERAGE

Points Earned / Points Possible

2.16 / 8



This category recognizes institutions that support sustainable food systems. Industrial food products can often have negative environmental and social impacts. Universities can use their purchasing power to influence distributors, support their local economy, improve food security and support fair and resilient food systems.

W&M was praised and recognized for the detail and clarity of data submitted by Dining Services in regards to food and beverage purchasing. It

revealed that 3% of food purchases were sustainably certified, or local and community-based. Dairy is locally purchased and does not contain rBST, cage-free eggs and Fair Trade coffee are a standard, and dining hall fish and seafood is marine steward council certified.

W&M received full marks for our sustainable dining program. We were one of the first universities in the state to begin collecting food waste for composting, now instituted in all campus dining halls, and vegan options are available at every meal. Although an early adopter of the trayless system that reduces food waste, we have continued progress through mandated reusable to-go containers. Our dining provider, Sodexo, participates in LeanPath, a program that helps reduce the creation of food waste through smart meters. Food that does go uneaten, but is still consumable, is picked up by the student organization, Campus Kitchen, and provided to those locally in need.

Points By Category

	Food and Beverage Purchasing	0.16 / 6
	Sustainable Dining	2 / 2

Recommendations

- Increase the purchase of sustainably certified or local and community-based food.
- Opt for sustainably produced, third-party verified animal products over conventionally produced animal products whenever possible.



Sustainability Spotlight

W&M DINING INTERNS

The W&M Sustainability Dining Interns are a group of a dozen W&M students who work to make the dining halls more environmentally-friendly. Through our various committees, we grow and harvest produce from a local farm, increase composting options on campus, and educate students about sustainable eating options.

Kelrae Farms

In the Spring 2016, William & Mary Dining established a partnership with Kelrae Farms, a local produce farm in Toano, VA. William & Mary leases 6-10 rows on their farm where sustainability interns grow and harvest seasonal produce to deliver to W&M Dining Halls (check out the tractor logo in the cafeterias!). This partnership serves to provide local food to the dining halls, and to educate William & Mary students on how to grow their own food. Dining Interns bring W&M student volunteers out to the farms on a weekly basis, and organize group farm days for the general student body or specific student groups upon request.

Achievements for 2016/2017 school year:

- Harvested over 430 lbs of produce from our plot
- Brought 87 new volunteers to the farm
- Totaled 348 volunteer hours
- Over the 2017 summer, we've harvested 2,345 pounds of produce, including potatoes, onions, and melons!





Sustainability Spotlight

W&M DINING INTERNS

Recycling / Compost Committee

W&M Dining composts in all of the dining halls! The compost is picked up by Chip Hall from Natural Organic Process Enterprises (NOPE) 3 times a week and is delivered to McGill Waverly Compost Facility in Waverly, VA to be turned into soil. Some of this soil is then brought to our farm to nourish our plots! In Spring 2017, dining interns started composting in Marketplace. This is the first time students have had the opportunity to compost themselves, instead of composting being a behind-the-scenes event. This allows W&M students to understand and actively partake in some of the green dining initiatives taking place on campus. In addition, in Spring 2017, dining interns started a public compost program where the W&M community can bring their food waste to a compost bin located behind the Sadler Center 24/7. Almost all of the materials in the cafeterias including single-use utensils and cups are now compostable, as they are a “plastic” made from vegetable byproducts. In addition, dining interns continue to educate students and staff through tabling and training events.

Achievements

- Started student compost bin available 24/7 behind the Sadler Center
- Started composting in Marketplace
- Changed most of the single use silverware to be compostable
- Visited compost plant
- Educated staff and students on composting
- Green to-go containers (2015)

Food Awareness (Meatless Monday included)

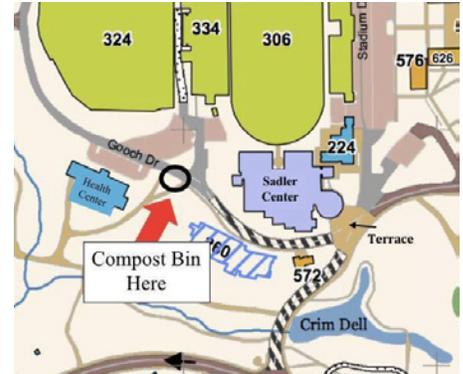
The Food Awareness Committee aims to educate students on where their food comes from and the student’s carbon footprint when it comes to food-related decisions. The committee works to educate students on how they can eat more environmentally friendly through initiatives like Meatless Mondays, where students can opt to reduce their meat consumption once a week, and by bringing in speakers to educate students.

Achievements

- 100 more students added to the Meatless Monday listserv
- 12 students completed our Meatless Monday rewards program, where participants were meatless for 5 Mondays in a row
- Worked with Chefs to put on a Meatless Monday entree option every 2-3 weeks, and in Fall 2017 expecting to do it every week
- Surveyed 75 students with 70% stating they would eat less meat if there were more vegetarian entrees, 56% noticed improvement in vegetarian dining options at Sadler, and 50% noticed improvement in vegan dining options at Sadler
- Started a weekly newsletter that informed students of the Meatless Meals every Monday and a fact about the benefits of an increased vegetarian diet
- Had a monthly food presenter

Hydroponics

This year we are launching a hydroponics station in the Commons to show students cool and local ways to grow their own food.





AVERAGE

Points Earned / Points Possible

2 / 4

This category recognizes universities that manage their grounds with consideration to economic, social and ecological factors that meet human needs and maintain healthy ecosystems.

We are fortunate to have a beautiful campus laced with trees and bordered by the College Woods and Lake Matoaka. A similarly beautiful, but more water dominant landscape, can be found at the marine science graduate school, VIMS, located in Gloucester Point, Va.

The 470 acres of the two campuses, excluding the College Woods, are managed using conventional landscape practices that include some integrated pest management principles. The majority of the College Woods is a contiguous, undeveloped natural preserve, designated by the Board of Visitors, that support biodiversity, community wellness and research opportunities.

Points By Category

 Landscape Management	0 / 2
 Biodiversity	2 / 2

Recommendations

- Explore a 4-tier Integrated Pest Management plan or organic landscape program for use on campus grounds.
- Research carbon sequestration and credit opportunities on university lands.



Alex McGrath '13 (photographer) captures a fellow student studying the forest in a deep ravine of the College Woods.

Sustainability Spotlight THE COLLEGE WOODS

Immediately adjacent to the developed campus is The College Woods, a 960 acre protected natural area that includes a 40 acre lake and a forest with trees that can exceed 150 years old. Winding foot-trails enable visitors to experience a diversity of habitats including examples of biological communities and species that are exceedingly rare on a global scale. As such, the College Woods has been invaluable to research, teaching, outreach and public health. Not only are the size and proximity to the College conducive for people to connect with nature through exercise and leisure, but the uniqueness and protection of the area have facilitated numerous long-term research projects that would not otherwise be possible amidst rampant and unpredictable development that dominates most other landscapes. Such research projects have produced transformative experiences in our students who have experienced the thrill of acquiring new knowledge about nature and sharing it with the world through scientific publication.



AHEAD

Points Earned / Points Possible

3.36 / 6

Purchasing decisions represent an opportunity for universities to choose environmentally and socially friendly products and services and support companies with strong commitments to sustainability.

Departments at W&M have a great deal of autonomy in purchasing, but much is accomplished through the contracts the university establishes for goods, and the policies set forth for those terms. Currently W&M implements sustainable purchasing policies for food services, cleaning chemicals, garments and transportation. 90% of the paper purchases through Procurement are 30-49% post consumer recycled content and 87.7% of expenditures on electronic products are EPEAT Gold certified, a ranking system that allows consumers to purchase electronics that consider the environmental impacts of the product.

W&M is part of the Virginia Higher Education Procurement Cooperative, or procurement consortium, which allows Virginia universities to jointly contract purchases for ideal pricing and options. There is great potential in this relatively new consortium, especially if sustainable purchasing were considered in the process.

Points By Category

 Sustainable Procurement	2 / 3
 Electronics Purchasing	0.96 / 1
N/A Cleaning & Janitorial Purchasing	0 / 1
 Office Paper Purchasing	.36 / 1

Recommendations

- Require sustainability be part of the purchasing considerations with preference towards those products.
- Create policies that reflect Facilities' and IT's current sustainable purchasing practices.
- Transition W&M paper purchasing standards to 90-100 post consumer recycled content and/or FSC.
- Encourage the Virginia Higher Education Procurement Cooperative to adopt sustainable purchasing as one of its priorities.



AVERAGE

Points Earned / Points Possible

3.52 / 7

The transportation category awards points based on progress towards sustainable transportation systems that encourage walking, biking and other forms of alternative transportation, in addition to reducing the use of conventional fuels.

Of the 250 vehicles owned or leased by the university, 40 are hybrid, 5 are electric, and 1 is biodiesel, the Tribe Truck Farm.

In a survey of the student population, it was determined that 77% of students use alternative transportation, with the majority walking or biking. Of those that use alternative transportation, most were undergraduate students, likely influenced by our high resident population. Graduate students mostly drive to campus, usually alone.

Sustainable transportation options are supported at W&M through discounted bus fares, carpool incentives, the car-sharing program Zip-car, preferred parking for fuel efficient vehicles and telecommuting policies for employees. A great deal is provided in relation to cycling on campus, much of it through the Bike Alliance and Parking Services, such as bicycle racks and storage, shower facilities, fix-it stations, road sharing features, and community rides.

Points By Category

 Campus Fleet	0.18 / 1
 Student Commute Modal Split	1.54 / 2
N/A Employee Commute Modal Split	0 / 2
 Support for Sustainable Transportation	1.8 / 2

Recommendations

- Although we maintain some hybrid vehicles, these only make up 16% of our fleet. Increase our number of alternative fuel vehicles.
- Incentives for graduate students and employees to carpool.
- Installation of electric vehicle charging stations.



AVERAGE

Points Earned / Points Possible

3.89 / 10

This category reflects efforts to divert waste from the landfill through recycling and composting, as well as systems that encourage the reuse of items and the limiting of waste creation. It encompasses household and office items, construction materials and hazardous waste.

DormMania, an award winning student conceived and managed diversion program, has repurposed or recycled over 27,000 lbs of material in the 3 years it has been running. Each spring, during move-out, unwanted dorm items are collected and then resold in the fall at bargain prices.

W&M participates annually in RecycleMania, a national recycling competition. Our diversion rate in the spring of 2016 was 38%, up 9% from the previous year, and has continued to increase. In 2016 W&M also placed first in the state for composting, diverting over 189 tons of food waste. During RecycleMania, an electronic waste collection is also held, acting as a good reminder to recycle these products. W&M safely disposes of hazardous materials and recycles electronics throughout the year as well.

Points By Category

-  Waste Minimization and Diversion
2.89 / 8
-  Construction & Demolition Waste Diversion
0 / 1
-  Hazardous Waste Management
1 / 1

Recommendations

- Increase diversion rates through outreach, clarification of recycling message, expansion of composting, and institutionalization of unique recyclables.
- Greater emphasis on waste reduction as a first step, followed by reuse and recycle.
- Phase in and institutionalize zero-waste athletic events.

Sustainability Spotlight DORMMANIA

DormMania is a student-run diversion enterprise, established in 2014 by Audrey Kriva '17 through a student Green Fee grant. Each spring, volunteers collect unwanted dorm items during move-out, sparing them a landfill fate. These perfectly useable items are cleaned, checked for safety and functionality with W&M Environmental Health & Safety, and stored over the summer. During fall move-in, DormMania sets up a yard sale of these products for bargain prices. Anything not sold is either donated or recycled. The program has diverted 27,000+ lbs to date, makes a net profit every year, and has been recognized with a Post Landfill Action Network Student Leadership Award.





AHEAD

Points Earned / Points Possible

5.59 / 7

This category recognizes universities that work to conserve water, making efforts to protect water quality and treat it as a resource rather than a waste product.

From 2005-2015, W&M reduced our potable water use by 39%! This was done through targeted and consecutive Facilities Management projects, many Green Fee funded, that purchased and installed low-flow fixtures, identified and fixed leaks, and upgraded equipment. In the process, our use of water for grounds also decreased by 22%.

W&M has a stormwater management plan to address the challenge of rainwater run-off on the campus. We also consider and use low impact development (LID) practices as frequently as possible in the form of retention basins, bioretention filters and cells, Filtera's, permeable pavement, rain barrels and rain gardens.

Points By Category

 Water Use	4.59 / 5
 Rainwater Management	1 / 2

Recommendations

- Increase the use of permeable pavement on the campus.
- Install additional meters so water use can be tracked granularly and additional efficiency projects identified.
- Adapt our stormwater management plan to require the use of LID practices for all new construction and major renovation.



Planning & Administration

The Planning & Administration section recognizes universities in areas of coordination, diversity, affordability, investment, health and wellbeing.

The intrinsic ties between the environment, economy, and society can be more easily seen when one looks at the entire system, from what impacts us to how we impact others. A healthy planet with clean air, water, earth, and abundant resources, provides the space for healthy individuals, while an inclusive and represented society that meets the needs of its people, is more likely to be a community that has the ability and stability to protect the environment.

Unfortunately, it is often minority groups and those of lower economic status that bear the brunt of environmental hazards, less able to deflect the impacts to themselves and their communities.

If people cannot meet their needs sustainably, they will meet them unsustainably. At the heart of sustainability is community, in the broadest sense of the word, and as we strive for the moving target of a sustainable world, what we work towards is sustainability for all.

“A world in which poverty and inequity are endemic will always be prone to ecological and other crises. Sustainable development requires meeting the basic needs of all and extending to all the opportunity to satisfy their aspirations for a better life.”

-The Brundtland Commission

PLANNING & ADMINISTRATION: Coordination & Planning



Points Earned / Points Possible

2.5 / 8

Universities that are institutionalizing sustainability by dedicating resources to coordination, developing plans, and engaging students, faculty, staff, and community members in governance are recognized in this category.

The Committee on Sustainability was established in 2008 and the first sustainability director hired in 2014, along with the creation of the sustainability office. W&M received marks for having a full time employee dedicated to this topic, but we could not claim credit for planning because we do not currently have documents with defined measurable goals, measurable being the key missing factor.

In regards to governance, we do have structures available for faculty, students, and staff to be directly involved in the university's decisions through groups like the Student Assembly, Faculty Assembly, and Staff Assembly, all of which are represented with the Board of Visitors. As a public institution and engaged member of the Williamsburg community, W&M also welcomes - and often receives - comments and suggestions from stakeholders and local public officials and citizens in the institution's operations, planning and decision-making. However, since we do not have a policy or formal body through which this takes place, we were unable to claim credit for that participation.

Points By Category

 Sustainability Coordination	1 / 1
 Sustainability Planning	0 / 4
 Participatory Governance	1.5 / 3

Recommendations

- Increase sustainability office staff to support ongoing sustainability efforts.
- Include sustainability at a high level within the university's strategic plan and create a comprehensive sustainability plan with measurable goals.
- Put into writing a policy that reflects what is already taking place in regards to community input on university decisions.
- Create a formal participatory body through which local government/education organizations, private sector organizations, and civil societies can provide input.

PLANNING & ADMINISTRATION: Diversity & Affordability



AHEAD

Points Earned / Points Possible

9.06 / 10

This credit recognizes universities that are working to advance diversity and affordability, to build a sustainable society where diverse groups can come together and work collaboratively to address sustainability challenges.

W&M scored high marks in this category. The Diversity Committee advises President Reveley on student, faculty and staff diversity matters and the President appointed the Task Force on Race and Race Relations in 2015 to engage faculty, students and staff on outcomes and campus climate. All students participate in cultural competence training during orientation. Faculty and staff have cultural competence training available as of 2017, but since our STARS submission was in 2016, we did not receive credit for it this time.

W&M has programs designed to recruit students from underrepresented groups, such as Autumn Blast and Escape. We also offer mentoring, counseling and peer support to students, faculty and staff from these groups through programs like PLUS, the Black Faculty and Staff Forum, Women's Network, and Professionals and Professional Faculty Assembly. Support for future faculty from underrepresented groups is provided through WMSure. W&M supports low-income students and families through programs like the W&M Promise, PLUS, WMSure, and meets 100% of the demonstrated financial need of almost all in-state students.

Points By Category

 Diversity and Equity Coordination	1.56 / 2
 Assessing Diversity and Equity	1 / 1
 Support for Underrepresented Groups	2.83 / 3
 Affordability and Access	3.67 / 4

Recommendations

- Create programs specifically designed to recruit both faculty and staff from underrepresented groups.
- Increased support for non-traditional students such as additional scholarship opportunities and childcare.

PLANNING & ADMINISTRATION: Investment & Finance



AVERAGE

Points Earned / Points Possible

0.12 / 7

This category recognizes universities that make investment decisions that promote sustainability. By using the tools of sustainable investing, institutions can encourage better corporate behavior and support innovation in sustainable products and services, while improving the long-term health of their endowments.

A small portion of W&M money available for investing is done so in a sustainable manner (inclusive of socially responsible, environmentally responsible, ethical, impact, and mission-related investment). This investment comes annually from the student Green Fee and is meant to establish an endowment that will help safeguard the future of sustainable progress at W&M.

Points By Category

 Committee on Investor Responsibility	0 / 2
 Sustainable Investment	0.12 / 4
 Investment Disclosure	0 / 1

Recommendations

- Since new investment opportunities must be approved by a governing Board (either Foundation or BOV), ask these Boards to include the addition of sustainability to their priorities for future investments.
- Creation of a publicly available sustainable investment policy that could be adopted by the governing Boards of W&M.

PLANNING & ADMINISTRATION: Wellbeing & Work



AVERAGE

Points Earned / Points Possible

3.4 / 7

The strength of a university is defined by its community and this category recognizes those that have incorporated sustainability into their human resources programs and policies. W&M has a very strong Health & Wellness presence on campus, particularly for the student body. Through it, students have access to a wellness program that makes counseling, referral, and wellbeing services available. Faculty and staff have access to some campus wellness services, such as the Campus Recreation Center, but counseling and referral services are mostly through insurance providers.

W&M received full marks in assessing employee satisfaction by completing an Employee Climate Survey. This survey was well participated and revealed that W&M scores above average in faculty and staff satisfaction compared to others. 79% of W&M employees make above the local living wage of \$15.52 per hour, set by the Massachusetts Institute of Technology's Living Wage Calculator. There was also a 22% reduction in workplace injuries per full time employee from 2012-2015.

Points By Category

	Employee Compensation	0.42 / 3
	Assessing Employee Satisfaction	1 / 1
	Wellness Program	1 / 1
	Workplace Health & Safety	0.98 / 2

Recommendations

- Consider ways to increase the number of contracted employees that make above the local living wage.
- Explore creation of a university wellness program for employees, to match the outstanding program provided to students.

Sustainability Spotlight

HEALTHY CAMPUSES 2020

The Healthy Campus 2020 Coalition is a group of students and professionals working together to enhance the overall health and well-being of the William & Mary community. The coalition meets to advance goals including, but not limited to, decreasing student anxiety, depression, and illness, increasing access to nutrition information and use of contraceptions, and decreasing the use of substances such as tobacco. These goals work within the W&M Eight Dimensions of Wellness: emotional, financial, environmental, intellectual, social, occupational, physical and spiritual.

One event was a Mindfulness Walk led through the Crim Dell Meadow. This walk illustrated how the Eight Dimensions of Wellness naturally flow together and overlap. It is hoped that participants reflected upon and worked toward a personal harmony within those Dimensions that are most authentic to them.

The harmonious well-being of individuals coalesces to sustainable communities, that simultaneously flourish in a healthy ecosystem and are more likely to make wise decisions about the long term future of that environment.





Innovation & Leadership

This category is a chance for universities to showcase their unique sustainability projects, initiatives and solutions that are not otherwise captured in STARS. W&M submitted 3 projects that were accepted as innovative.

Points Awarded

Tribe Truck Farm	1 / 1
Greater Williamsburg Area Park Rx	1 / 1
Sustainability Tool Library	1 / 1



Tribe Truck Farm

The Tribe Truck Farm is a biodiesel truck with a garden in the bed used for education and outreach purposes on campus and in the community. The Truck was purchased with the help of a W&M Green Fee grant and a Kickstarter campaign by two students who taught themselves how to install the garden and the biodiesel conversion kit. The Truck has been in service for 3 years now and has increased W&M Sustainability's outreach efforts in food related and transportation fields. Many locations visited are public schools, although people are always thrilled to see it at general events such as the Earth Day Festival and Farmer's Market. The Truck teaches the importance of food and that gardens can be grown anywhere, educational value is added through the biodiesel conversion.





GWA Park Rx

Greater Williamsburg Area Park Rx (GWA Park Rx) has been partnering with healthcare providers since 2014, providing them training and tools to 'prescribe' their patients time in area parks to enhance mental and physical health, and treat and prevent lifestyle driven illnesses. Our program launched a new initiative in 2016, in which students are trained to be Peer Park Ambassadors, referring their fellow students to green spaces on or near the William & Mary campus. Our user interface estimates that in each month, an average of eight people are prescribed time in local parks using our program, and with our new expansion on campus, this is expected to grow rapidly.



Sustainability Tool Library

The student Green Fee has been funding projects since 2008, many of which have required tools and equipment for construction of physical structures. The tools are often only needed at the beginning of the project, but since no structure existed to gather, store and maintain these tools, they often became the property of the project. This meant new projects were asking for basic equipment every year. By partnering with Facilities for supervision/education and the W&M Keck Lab for storage, we now have the Sustainability Tool Library. A resource that has proven fiscally responsible by reducing the need to redundantly fund items, environmentally responsible by reducing resource use in the creation of redundant tools, and socially advantageous through the creation of a system that provides lessons and supervision in the use of tools that students may not previously have been familiar with.



William & Mary has been recognized by multiple organization for our sustainability efforts.



Silver Rating, Association for the Advancement of Sustainability in Higher Education, 2016



Guide to 375 Green Colleges, 2017



1st in Virginia: Recycling and Composting, 2016



Student Leadership Award

W&M
SUSTAINABILITY

sustainability.wm.edu