Bucknell University

The following information was submitted through the STARS Reporting Tool.

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The information presented in this submission is self-reported and has not been verified by AASHE or a third party. If you believe any of this information is erroneous, please see the process for inquiring about the information reported by an institution.

Institutional Characteristics

Institutional Characteristics

The passthrough subcategory for the boundary

Credit
Institutional Boundary
Operational Characteristics
Academics and Demographics

Institutional Boundary

Criteria

This won't display

"---" indicates that no data was submitted for this field

Institution type:

Master

Institutional control:

Private non-profit

Which campus features are present and included in the institutional boundary?:

	Present?	Included?
Agricultural school	No	
Medical school	No	
Pharmacy school	No	
Public health school	No	
Veterinary school	No	
Satellite campus	No	
Hospital	No	
Farm larger than 5 acres or 2 hectares	No	
Agricultural experiment station larger than 5 acres or 2 hectares	No	

Reason for excluding agricultural school:

Reason for excluding medical school:
Descent for each ding who were on solved.
Reason for excluding pharmacy school:
Reason for excluding public health school:

Reason for excluding veterinary school:
Reason for excluding satellite campus:
Reason for excluding hospital:
Reason for excluding farm:
Reason for excluding agricultural experiment station:
Narrative:

Operational Characteristics

Criteria	
n/a	
	"" indicates that no data was submitted for this field
Endowment size.	
Endowment size: 721,800,000 US/Canadian \$	
Total campus area:	
450 Acres	
IECC climate region:	
Cold	
T 1	
Locale: Small town	
Sinan town	
Gross floor area of building space:	
2,754,135 Gross Square Feet	
Conditioned floor area:	
2,754,135 Square Feet	
Floor area of laboratory space:	
390,408 Square Feet	
Floor area of healthcare space:	
8,931 Square Feet	
Floor area of other energy intensive space:	
431,202 Square Feet	
•	
Floor area of residential space:	
784,596 Square Feet	
Electricity use by source::	

Percentage of total electricity use (0-100)

Biomass	0.06
Coal	1.62
Geothermal	0
Hydro	0.04
Natural gas	93.80
Nuclear	1.28
Solar photovoltaic	0.01
Wind	2.34
Other (please specify and explain below)	0.86

A brief description of other sources of electricity not specified above:

The university uses oil and propane. The electricity bought, that is not from one of the fuel sources above, comes from captured methane, a non-renewable fuel cell, oil sources, solid waste and wood.

Energy used for heating buildings, by source::

	Percentage of total energy used to heat buildings (0-100)
Biomass	0
Coal	0
Electricity	0
Fuel oil	0.19
Geothermal	0
Natural gas	99.80
Other (please specify and explain below)	0

A brief description of other sources of building heating not specified above:			

Academics and Demographics

Criteria	
n/a	
	"" indicates that no data was submitted for this field
Number 6 - Jane Water	
Number of academic divisions: 3	
Number of academic departments (or the equivalent):	
37	
Full-time equivalent enrollment:	
3,527.20	
Full-time equivalent of employees:	
1,308.70	
Full-time equivalent of distance education students:	
0	
Total number of undergraduate students:	
3,532	
Total number of graduate students:	
76	
Number of degree-seeking students:	
3,551	
Number of non-credit students:	
41	
Number of employees:	
1,417	
Number of residential students: 2.973	
4.71.1	

Number of residential employees:

17

Number of in-patient hospital beds:

0

Academics

Curriculum

This subcategory seeks to recognize institutions that have formal education programs and courses that address sustainability. One of the primary functions of colleges and universities is to educate students. By training and educating future leaders, scholars, workers, and professionals, higher education institutions are uniquely positioned to prepare students to understand and address sustainability challenges. Institutions that offer courses covering sustainability issues help equip their students to lead society to a sustainable future.

Credit
Academic Courses
earning Outcomes
Indergraduate Program
Graduate Program
mmersive Experience
ustainability Literacy Assessment
ncentives for Developing Courses
Campus as a Living Laboratory

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Part 1

Institution offers sustainability courses and/or courses that include sustainability and makes an inventory of those courses publicly available.

Part 2

Institution's academic departments (or the equivalent) offer sustainability courses and/or courses that include sustainability.

In order to report and earn points for this credit, the institution must conduct a course inventory. The inventory should consist of two parts:

- 1) An inventory of sustainability courses that includes, at minimum, the title, department (or equivalent), and level of each course (i.e. undergraduate or graduate), as well as a brief description if the sustainability focus of the course is not apparent from its title
- 2) An inventory of other courses that include sustainability. The inventory includes, at minimum, the title, department (or the equivalent), and level of each course and a description of how sustainability is integrated into each course.

A course may be a sustainability course or it may include sustainability; no course should be identified as both:

- A sustainability course is a course in which the primary and explicit focus is on sustainability and/or on understanding or solving one or more major sustainability challenge (e.g. the course contributes toward achieving principles outlined in the Earth Charter).
- A course that includes sustainability is primarily focused on a topic other than sustainability, but incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability issues throughout the course.

For guidance on conducting a course inventory and distinguishing between sustainability courses and courses that include sustainability, see *Standards and Terms* and the Credit Example in the STARS Technical Manual. An institution that has developed a more refined approach to course classification may use that approach as long as it is consistent with the definitions and guidance provided.

Each institution is free to choose a methodology to identify sustainability courses that is most appropriate given its unique circumstances. Asking faculty and departments to self-identify sustainability courses and courses that include sustainability using the definitions outlined in *Standards and Terms* or looking at the stated learning outcomes and course objectives associated with each course may provide a richer view of sustainability course offerings than simply reviewing course descriptions, but it is not required.

This credit does not include continuing education and extension courses, which are covered by EN 11: Continuing Education.

Submission Note:

Since the performance year, some significant changes to sustainability programming have occurred at the University. Most notably the Bucknell University Environmental Center has changed to the Bucknell Center for Sustainability and the Environment, and the Campus Greening Initiative has changed to the Sustainable Design Program. As a result, the content of the associated websites may reflect these changes.

"---" indicates that no data was submitted for this field

Figures required to calculate the percentage of courses with sustainability content::

	Undergraduate	Graduate
Total number of courses offered by the institution	1,389	300
Number of sustainability courses offered	128	2
Number of courses offered that include sustainability	3	0

Number of academic departments (or the equivalent) that offer at least one sustainability course and/or course that includes sustainability (at any level):

27

Total number of academic departments (or the equivalent) that offer courses (at any level):

37

Number of years covered by the data:

One

A copy of the institution's inventory of its course offerings with sustainability content (and course descriptions):

BUCourseCatalog2013-2014 (2).xls

An inventory of the institution's course offerings with sustainability content (and course descriptions):

The website URL where the inventory of course offerings with sustainability content is publicly available:

http://www.bucknell.edu/centers-institutes-and-resources/environmental-center/campus-greening-initiative/environmental-assessment.html

A brief description of the methodology the institution followed to complete the course inventory:

A student intern for the Environmental Center, working under the supervision of the director of the Campus Greening Initiative, reviewed every course listed in the 2013 course catalog and compared course descriptions to AASHE's definitions for sustainability courses. Where there was uncertainty, faculty in charge of the courses were questioned about course content directly.

How did the institution count courses with multiple offerings or sections in the inventory?:

Each course was counted as a single course regardless of the number of offerings or sections

A brief description of how courses with multiple offerings or sections were counted (if different from the options outlined above):

Courses containing more than one section were only counted as one course.

Which of the following course types were included in the inventory?:

	Yes or No
Internships	No
Practicums	No
Independent study	No
Special topics	Yes
Thesis/dissertation	No
Clinical	No
Physical education	No
Performance arts	Yes

Does the institution designate sustainability courses in its catalog of course offerings?:

No

Does the institution designate sustainability courses on student transcripts?:

No

Learning Outcomes

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution's students graduate from degree programs that include sustainability as a learning outcome or include multiple sustainability learning outcomes. Sustainability learning outcomes (or the equivalent) may be specified at:

- Institution level (e.g. covering all students)
- Division level (e.g. covering one or more schools or colleges within the institution)
- · Program level
- · Course level

This credit includes graduate as well as undergraduate programs. For this credit, "degree programs" include majors, minors, concentrations, certificates, and other academic designations. Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*. Programs that include co-curricular aspects may count as long as there is an academic component of the program. Learning outcomes at the course level count if the course is required to complete the program.

This credit is inclusive of learning outcomes, institutional learning goals, general education outcomes, and graduate profiles that are consistent with the definition of "sustainability learning outcomes" included in Standards and Terms.

Institutions that do not specify learning outcomes as a matter of policy or standard practice may report graduates from sustainability-focused programs (i.e. majors, minors, concentrations and the equivalent as reported for *AC 3: Undergraduate Program* and *AC 4: Graduate Program*) in lieu of the above criteria.

Submission Note:

All Arts and Sciences students are required to take an Environmental Connections course before graduating. Approximately 80% of any graduating class is bound by the A&S curriculum. The Environmental Connections requirement has specific learning outcomes and these are assessed regularly.

"---" indicates that no data was submitted for this field

Number of students who graduated from a program that has adopted at least one sustainability learning outcome:

747

Total number of graduates from degree programs:

882

A copy of the list or inventory of degree, diploma or certificate programs that have sustainability learning outcomes:

A list of degree, diploma or certificate programs that have sustainability learning outcomes:

All Arts and Sciences degree programs.

A list or sample of the sustainability learning outcomes associated with degree, diploma or certificate programs (if not included in an inventory above):

Students will analyze, evaluate, and synthesize complex interrelationships between humans and the natural world.

Students will evaluate critically their personal connections to the natural world in one of the following ways: reasoning about ethical issues, directly experiencing the natural world, connecting to their community, or relating individual choices to larger societal goals.

Students will apply knowledge of the physical, cultural, or social connections between humans and the natural world, according to their interests and disciplinary preferences, in at least one of the following ways:

Tracing the fundamental physical interconnections between humans, other species, and the environment

Explaining how natural systems function and how human actions affect them

Distinguishing between human impacts and natural changes

Elucidating the concept of sustainability

Analyzing current cultural narratives that shape our relationship to the environment

Analyzing societal mechanisms that influence our relationship to the environment

Assessing governance and political conflicts regarding human-environment relationships

Understanding the role of technological, economic and scientific knowledge in environmental decision-making and power relations between social actors.

The website URL where information about the institution's sustainability learning outcomes is available:

https://www.bucknell.edu/arts-and-sciences-college-of/college-core-curriculum/tools-for-critical-engagement.html

Undergraduate Program

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution offers at least one:

• Sustainability-focused program (major, degree program, or equivalent) for undergraduate students

And/or

• Undergraduate-level sustainability-focused minor or concentration (e.g. a concentration on sustainable business within a business major).

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*.

"---" indicates that no data was submitted for this field

Does the institution offer at least one sustainability-focused major, degree program, or the equivalent for undergraduate students?:

Yes

The name of the sustainability-focused, undergraduate degree program (1st program):

Environmental Studies

A brief description of the undergraduate degree program (1st program):

Students can major in either environmental studies or environmental science. An interdisciplinary Bachelor of Arts major in Environmental Studies is offered for the student with an abiding interest in the general environmental problems faced by humans, and with special concern for their humanistic, policy, and social sciences aspects. The B.A. in Environmental Studies is a strong, broad, liberal arts degree. It also is a preparation for one of the growing numbers of environmental careers in planning, business, non-profits, law, administration, or education. The B.A. in Environmental Science is only available as a second major to students who major in biology, chemistry, or geology and therefore may be thought of as a means of adding an environmental concentration to a B.A. science degree. These three disciplines form the core of Environmental Science, and consequently the first major ensures that students have sufficient depth of knowledge in a particular area of Environmental Science. Complementing the depth a student receives from the biology, chemistry, or geology major, the B.A. in Environmental Science provides breadth across the interdisciplinary field of Environmental Science.

The website URL for the undergraduate degree program (1st program):

http://www.bucknell.edu/EnvironmentalStudies

The name of the sustainability-focused, undergraduate degree program (2nd program):

Managing for Sustainability

A brief description of the undergraduate degree program (2nd program):

All organizations, from businesses to governments to civic organizations, seek to generate value with finite resources. Economic sustainability can be achieved in the long term by realigning organizational strategies to become ecologically and socially sustainable. By taking courses related to environmental study, science, human behavior, design or engineering, managing for sustainability students possess the skills, knowledge, and passion to achieve sustainable environmental, social and economic goals.

The website URL for the undergraduate degree program (2nd program):

http://www.bucknell.edu/ManagingForSustainability

The name of the sustainability-focused, undergraduate degree program (3rd program):

Civil and Environmental Engineering

A brief description of the undergraduate degree program (3rd program):

The goal of Bucknell's civil engineering and environmental engineering department is to provide students with the educational background they'll need for their first job in engineering, yet also give them the foresight they'll need for their last engineering position. The curriculum offers courses to undergraduates in a wide range of areas, including environmental engineering and wastes treatment, transportation systems, geotechnical engineering, hydraulics, and structural engineering. The program strikes a balance between modern computer applications and traditional "hands-on" engineering. News media continually report that the nation's infrastructure -- highways, ports, roads, bridges, dams, airports, public buildings, mass transit, railroads, and water management -- is in need of extensive repair and modernization. Furthermore, many countries in the world are expected to expand construction. In short, the outlook is good for the future of civil and environmental engineering. As highly skilled professionals, engineers will be in demand to plan, design, construct, and assist in the operation and maintenance of transportation systems, water resources, environmental protection systems and urban development.

The website URL for the undergraduate degree program (3rd program):

http://www.bucknell.edu/CivilAndEnvironmentalEngineering

The name and website URLs of all other sustainability-focused, undergraduate degree program(s):

Environmental Geosciences:

http://www.bucknell.edu/Geology

Does the institution offer one or more sustainability-focused minors, concentrations or certificates for undergraduate students?:

Yes

The name of the sustainability-focused undergraduate minor, concentration or certificate (1st program):

Environmental Studies

A brief description of the undergraduate minor, concentration or certificate (1st program):

Bachelor of Arts major in Environmental Studies is offered for the student with an abiding interest in the general environmental problems faced by humans, and with special concern for their humanistic, policy, and social sciences aspects. The B.A. in Environmental Studies is a strong, broad, liberal arts degree. It also is a preparation for one of the growing numbers of environmental careers in planning, business, non-profits, law, administration, or education.

The website URL for the undergraduate minor, concentration or certificate (1st program):

http://www.bucknell.edu/majors-and-minors/course-catalog/environmental-studies.html#enstminor

The name of the sustainability-focused undergraduate minor, concentration or certificate (2nd program):

Development and Sustainability

A brief description of the undergraduate minor, concentration or certificate (2nd program):

International Relations thematic minor track program. A study of environmental and energy economics in the context of global resources and politics. The theme of sustainable development will be linked to the new realities of international relations.

The website URL for the undergraduate minor, concentration or certificate (2nd program):

https://www.bucknell.edu/majors-and-minors/course-catalog/international-relations.html#irminor

The name of the sustainability-focused undergraduate minor, concentration or certificate (3rd program):

Environmental Geology

A brief description of the undergraduate minor, concentration or certificate (3rd program):

The Environmental Geology minor requires four courses, elaborated in the URL below.

The website URL for the undergraduate minor, concentration or certificate (3rd program):

http://coursecatalog.bucknell.edu/collegeofartsandsciencescurricula/areasofstudy/geologygeol/#m inorstext

The name, brief description and URL of all other undergraduate-level sustainability-focused minors, concentrations and certificates:

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution offers at least one:

• Sustainability-focused program (major, degree program, or equivalent) for graduate students

And/or

• Graduate-level sustainability-focused minor, concentration or certificate (e.g. a concentration on sustainable business within an MBA program).

Extension certificates and other certificates that are not part of academic degree programs do not count for this credit; they are covered in *EN 11: Continuing Education*.

"---" indicates that no data was submitted for this field

Does the institution offer at least one sustainability-focused major, degree program, or the equivalent for graduate students?:

Yes

The name of the sustainability-focused, graduate-level degree program (1st program):

Environmental Engineering

A brief description of the graduate degree program (1st program):

Faculty research interests emphasize the following areas: biodegradation of municipal solid waste and aqueous organics; biological conversion of waste materials to useful forms of energy, such as methane and hydrogen; life-cycle analysis of engineered environmental systems; bioremediation of contaminated ground water; coagulation, flocculation, and sedimentation in aqueous systems; mitigation of odor potential at wastewater and solid waste treatment facilities; bioremediation of contaminated ground water; environmental geotechnics; vertical subsurface barriers for the remediation of hazardous waste sites; transformation of slurry trench cutoff wall materials from the passive hydraulic barrier materials into active treatment materials while maintaining their passive hydraulic barrier characteristics; watershed processes and land surface-atmosphere interactions; appropriateness of existing numerical models for nonlinear transport processes in environmental systems; adsorption of heavy metals by microorganisms; characterization of pollution from agricultural sources.

http://www.bucknell.edu/graduate-studies/degree-programs/environmental-engineering-ms.html The name of the sustainability-focused, graduate-level degree program (2nd program): Civil Engineering A brief description of the graduate degree program (2nd program): Faculty research interests emphasize the following areas: environmental engineering, soil mechanics and foundation engineering, structures, transportation, water resources, computer graphics, computer-aided design, railroad engineering, engineering mechanics, timber structures, pavement design, and materials performance and characterization, construction safety and innovation. The website URL for the graduate degree program (2nd program): http://www.bucknell.edu/graduate-studies/degree-programs/civil-engineering-ms.html The name of the sustainability-focused, graduate-level degree program (3rd program): A brief description of the graduate degree program (3rd program): ---The website URL for the graduate degree program (3rd program): The name and website URLs of all other sustainability-focused, graduate-level degree program(s): Does the institution offer one or more graduate-level sustainability-focused minors, concentrations or certificates?: No The name of the graduate-level sustainability-focused minor, concentration or certificate (1st program): A brief description of the graduate minor, concentration or certificate (1st program):

The name of the graduate-level sustainability-focused minor, concentration or certificate (2nd program):

The website URL for the graduate minor, concentration or certificate (1st program):

A brief description of the graduate minor, concentration or certificate (2nd program):
The website URL for the graduate minor, concentration or certificate (2nd program):
The name of the graduate-level sustainability-focused minor, concentration or certificate (3rd program):
A brief description of the graduate minor, concentration or certificate (3rd program):
The website URL for the graduate minor, concentration or certificate (3rd program):
The name and website URLs of all other graduate-level, sustainability-focused minors, concentrations and certificates:

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution offers at least one immersive, sustainability-focused educational study program. The program is one week or more in length and may take place off-campus, overseas, or on-campus.

For this credit, the program must meet one or both of the following criteria:

· It concentrates on sustainability, including its social, economic, and environmental dimensions

And/or

It examines an issue or topic using sustainability as a lens.

For-credit programs, non-credit programs and programs offered in partnership with outside entities may count for this credit. Programs offered exclusively by outside entities do not count for this credit.

See the Credit Example in the STARS Technical Manual for further guidance.

Submission Note:

This program has been offered twice, once in 2010 and once in 2012. The 2012 course was offered as an intensive May program, rather than a full semester program.

"---" indicates that no data was submitted for this field

Does the institution offer at least one immersive, sustainability-focused educational study program that meets the criteria for this credit?:

Yes

A brief description of the sustainability-focused immersive program(s) offered by the institution:

Semester on the Susquehanna: A full-semester learning experience where the student works primarily off campus, much like a study-abroad campus using the watershed as an outdoor classroom.

The website URL where information about the immersive program(s) is available:

http://www.departments.bucknell.edu/environmental_center/inside/teaching/semester_on_the_susque hanna.html			

Sustainability Literacy Assessment

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution conducts an assessment of the sustainability literacy of its students. The sustainability literacy assessment focuses on knowledge of sustainability topics and may also address values, behaviors and/or beliefs. Assessments that focus exclusively on values, behaviors and/or beliefs are not sufficient to earn points for this credit.

Institution may conduct a follow-up assessment of the same cohort group(s) using the same instrument.

This credit includes graduate as well as undergraduate students.

This credit was marked as Not Pursuing so Reporting Fields will not be displayed.

Incentives for Developing Courses

Responsible Party

Edwin F Ladd

Professor of Physics Physics and Astronomy

Criteria

Institution has an ongoing program or programs that offer incentives for faculty in multiple disciplines or departments to develop new sustainability courses and/or incorporate sustainability into existing courses or departments. The program specifically aims to increase student learning of sustainability.

Incentives may include release time, funding for professional development, and trainings offered by the institution.

Incentives for expanding sustainability offerings in academic, non-credit, and/or continuing education courses count for this credit.

"---" indicates that no data was submitted for this field

Does the institution have an ongoing incentives program or programs that meet the criteria for this credit?:

Yes

A brief description of the program(s), including positive outcomes during the previous three years:

The University encourages the development of Environmental Connections (EVCN) courses for the CCC. Each year, we request proposals from faculty members for development of new courses for all of the CCC components, including EVCN. Over the past three years, we have provided summer funding for five faculty members who have each developed an EVCN course. In exchange for this funding, faculty members agree to develop the course, and teach it twice during the subsequent three years.

A brief description of the incentives that faculty members who participate in the program(s) receive:

Members who participate in the program receive summer funding as an incentive to develop Environmental Connections courses.

The website URL where information about the incentive program(s) is available:

http://www.eg.bucknell.edu/physics/astronomy/ladd/CCCLearningGoals.html

Campus as a Living Laboratory

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution is utilizing its infrastructure and operations for multidisciplinary student learning, applied research and practical work that advances sustainability on campus in at least one of the following areas:

- Air & Climate
- · Buildings
- Dining Services/Food
- Energy
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Coordination, Planning & Governance
- Diversity & Affordability
- Health, Wellbeing & Work
- Investment
- Public Engagement
- Other

This credit includes substantive work by students and/or faculty (e.g. class projects, thesis projects, term papers, published papers) that involves active and experiential learning and contributes to positive sustainability outcomes on campus (see the Credit Example in the STARS Technical Manual). On-campus internships and non-credit work (e.g. that take place under supervision of sustainability staff or committees) may count as long as the work has a learning component.

This credit does not include immersive education programs, co-curricular activities, or community-based work, which are covered by *AC* 5: *Immersive Experience*, credits in the Campus Engagement subcategory, and credits in the Public Engagement subcategory, respectively.

Submission Note:

Since the performance year, some significant changes to sustainability programming have occurred at the University. Most notably the Bucknell University Environmental Center has changed to the Bucknell Center for Sustainability and the Environment, and the Campus Greening Initiative has changed to the Sustainable Design Program. As a result, the content of the associated websites may reflect these changes.

Is the institution utilizing the campus as a living laboratory in the following areas?:

	Yes or No
Air & Climate	Yes
Buildings	Yes
Dining Services/Food	Yes
Energy	Yes
Grounds	Yes
Purchasing	No
Transportation	Yes
Waste	Yes
Water	Yes
Coordination, Planning & Governance	
Diversity & Affordability	
Health, Wellbeing & Work	No
Investment	Yes
Public Engagement	Yes
Other	Yes

A brief description of how the institution is using the campus as a living laboratory for Air & Climate and the positive outcomes associated with the work:

Students have completed greenhouse gas inventories every two years since 2006. Since 2008 these inventories have served to fulfill the requirements of the ACUPCC, and have helped the university develop greenhouse gas reduction strategies.

Campus Sustainability Data Collector | AASHE

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A brief description of how the institution is using the campus as a living laboratory for Buildings and the positive outcomes associated with the work:

In 2010, as the result of a student internship by Rebecca Shopiro '12, the university installed its first green roof on the Dana Engineering Building. In subsequent years the roof has been used in research conducted by Civil and Environmental Engineering professor Kevin Gilmore with several other student interns. The research has been focused on documenting and quantifying the benefits of green roofs. As a result of the success of this first green roof, two others have been built on the campus, a second green roof on the Dana Engineering Building, and a third on Academic West, the university's first green academic building.

A brief description of how the institution is using the campus as a living laboratory for Dining Services/Food and the positive outcomes associated with the work:

For the past three years, students in the Mindful Consumption foundation seminar, in conjunction with the director of dining and visiting scholar Jonathan Bloom, have conducted food waste weighs in the Bostwick Dining Hall. The students have also created informational posters for the dining hall to raise awareness of the issue of food waste.

A brief description of how the institution is using the campus as a living laboratory for Energy and the positive outcomes associated with the work:

Since 2006 students have participated in the installation and monitoring of renewable energy infrastructure on campus, including several photovoltaic arrays, a solar thermal unit, and a wind turbine. The Renewable Energy Scholars group, which includes students, faculty, and staff, host a Renewable Energy Workshop each year to educate the campus and the community about the benefits of these renewable energy projects.

A brief description of how the institution is using the campus as a living laboratory for Grounds and the positive outcomes associated with the work:

Since 2007, the Campus Greening Initiative has maintained a native plants garden on the grounds of the Bucknell University Environmental Center. The garden began as a student internship, and several other student interns have been involved in studying and maintaining the garden, creating educational garden guides, and organizing garden education events for the Center.

A brief description of how the institution is using the campus as a living laboratory for Purchasing and the positive outcomes associated with the work:

A brief description of how the institution is using the campus as a living laboratory for Transportation and the positive outcomes associated with the work:

Civil and Environmental Engineering professor Michelle Beiler has used the campus as a living laboratory for several student projects in her Sustainable Transportation class. Through an introductory course in transportation engineering, elective courses in transportation planning, as well as civil engineering senior design projects, the campus is used as a living learning laboratory, specifically with regards to laboratory exercises as well as course projects. Laboratory exercises typically involve students dividing up into teams and applying

course material to transportation infrastructure on campus such as through a pavement assessment or a speed spot study. Course projects provide students the opportunity to synthesize course material and apply it to real world transportation needs on campus as well as throughout the surrounding community of Lewisburg. Examples of projects include a safety study of Moore Avenue (which led to infrastructure improvements), design of the Buffalo Valley Rail Trail extension, a pedestrian mobility analysis of Market Street, and an evaluation of ped/bike travel demand on campus.

A brief description of how the institution is using the campus as a living laboratory for Waste and the positive outcomes associated with the work:

In 2010/2011 a comprehensive waste audit was conducted on 10 different types of university buildings, resulting in an honors thesis by Environmental Studies student Hallie Kennan '12. The results of the audits helped guide the decision for the university to move towards single stream recycling. In 2013 student intern Zach Berliner '15 worked closely with associate director of operations Merritt Pedrick to study and develop signage for single stream recycling on campus. New signs were widely distributed across campus, leading to better results in the separation of trash and recyclables.

A brief description of how the institution is using the campus as a living laboratory for Water and the positive outcomes associated with the work:

In 2013 student intern Josh Berliner '15 completed a comprehensive audit of water-consuming fixtures on campus in cooperation with associate director of utilities maintenance Greg Koontz. The study was used as the basis for a successful Green Fund proposal to replace old fixtures with water conserving alternatives.

A brief description of how the institution is using the campus as a living laboratory for Coordination, Planning & Governance and the positive outcomes associated with the work:

Managing for Sustainability professor Neil Boyd has used the campus as a living laboratory for his managment classes. He uses the university as a teaching-laboratory for MSUS 300 (Fundamentals of Managing for Sustainability), an upper-level management course in the School of Management that is a required course for completion of a major in Managing for Sustainability. The class engages the student as if they are a manager in a variety of sustainability-related roles. For example, during the course of the term, students are asked to consider being in the role of a sustainability VP, a Human Resource Director, a President, a VP of Marketing, a VP of Finance, etc... They consider these roles in two ways: 1) they are asked to engage in reading, field trips, and interactions with experts in particular functional units of Bucknell, to learn a variety of content issues that a manager faces in these particular roles. Then, 2) they are asked to engage in open discussions, produce oral presentations, and complete decision-making reflection papers that require assimilation of a variety of sets of information into cogent arguments about what needs to occur in those roles in order to design effective structure and change processes that move an effective sustainability agenda forward.

A brief description of how the institution is using the campus as a living laboratory for Diversity & Affordability and the positive outcomes associated with the work:

A brief description of how the institution is using the campus as a living laboratory for Health, Wellbeing & Work and the positive outcomes associated with the work:

A brief description of how the institution is using the campus as a living laboratory for Investment and the positive outcomes associated with the work:

In 2011 students from the Bucknell Environmental Club, in cooperation with the Campus Greening Council, established the Green Fund, a revolving fund in which students have continued to participate both through serving on its advisory committee, and creating proposals for funding consideration. To date, several student proposals involving energy conservation investments have been accepted and executed, resulting in a return of over \$50,000 to the fund.

A brief description of how the institution is using the campus as a living laboratory for Public Engagement and the positive outcomes associated with the work:

The University uses the campus as a living laboratory for Public Engagement in a few ways. One, the green roof displays have been the center of public events. So too has the native plants garden. Both of these spaces on campus have been used for public talks about the sustainability merits of each. Signage associated with the Grove, the collection of trees across all of campus, have proven to be useful for educating members of the public about tree species and plant diversity. Finally, the ongoing Miller Run project will create a network of public displays and data monitoring devices which members of the public can access to see how restoration of the stream which goes through campus has aesthetic and environmental impacts.

A brief description of how the institution is using the campus as a living laboratory in Other areas and the positive outcomes associated with the work:

In 2011 the university received a Growing Greener grant from the Pennsylvania Department of Environmental Protection to restore the headwaters of its campus stream, Miller Run. Since receiving this grant, dozens of students, faculty, and staff have been involved in projects relating to the restoration. The restoration is expected to be completed within the coming year.

The website URL where information about the institution's campus as a living laboratory program or projects is available:

http://www.bucknell.edu/EnvironmentalCenter

Research

This subcategory seeks to recognize institutions that are conducting research on sustainability topics. Conducting research is a major function of many colleges and universities. By researching sustainability issues and refining theories and concepts, higher education institutions can continue to help the world understand sustainability challenges and develop new technologies, strategies, and approaches to address those challenges.

Credit	
Academic Research	
Support for Research	
Access to Research	

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Part 1

Institution's faculty and/or staff conduct sustainability research and the institution makes an inventory of its sustainability research publicly available.

Part 2

Institution's academic departments (or the equivalent) include faculty and staff who conduct sustainability research.

Any level of sustainability research is sufficient to be included for this credit. In other words, a researcher who conducts both sustainability research and other research may be included.

In order to report for this credit, the institution should conduct an inventory to identify its sustainability research activities and initiatives.

Each institution is free to choose a methodology to identify sustainability research that is most appropriate given its unique circumstances. For example, an institution may distribute a survey to all faculty members and ask them to self-identify as being engaged in sustainability research or ask the chairperson of each department to identify the sustainability research activities within his or her department. The research inventory should be based on the definition of "sustainability research" outlined in Standards and Terms and include, at minimum, all research centers, laboratories, departments, and faculty members whose research focuses on or is related to sustainability.

"---" indicates that no data was submitted for this field

Number of the institution's faculty and/or staff engaged in sustainability research:

99

Total number of the institution's faculty and/or staff engaged in research:

412

Number of academic departments (or the equivalent) that include at least one faculty or staff member that conducts sustainability research:

24

The total number of academic departments (or the equivalent) that conduct research:

A copy of the sustainability research inventory that includes the names and department affiliations of faculty and staff engaged in sustainability research:

AASHE STARS Research.xlsx

Names and department affiliations of faculty and staff engaged in sustainability research:

- 1. Amador, Nathanael Santos, Geology GEOLG
- 2. Andrews, Marcellus W ECONO
- 3. Antonaccio, Maria A RELIG
- 4. Armstrong, Elizabeth Logan EASIA
- 5. Banks, Nina Elizabeth ECONO
- 6. Bedi, Heather P ENVIRO
- 7. Beiler, Michelle Renee CIVILE
- 8. Benowitz-Fredericks, Z. Morgan BIOL
- 9. Boyd, Neil M MANGT
- 10. Buonopane, Stephen G CIVILE
- 11. Carr, Glynis ENGLI
- 12. Castle, Karen Janene CHEM
- 13. Chancellor, Nathan Brent CIVILE
- 14. Chernin, Mitchell I BIOL
- 15. Cons, Jason Gregory INREL
- 16. Crago, Richard David CIVILE
- 17. Csernica, Jeffrey CHEME
- 18. DiStefano, Thomas D CIVILE
- 19. Dubois, Philippe Christian DLCL
- 20. Duckles, Beth M SOCIO
- 21. Evans, Elizabeth Capaldi BIOL
- 22. Evans, Jeffrey C CIVILE
- 23. Gabauer, Douglas J CIVILE
- 24. Gates, Julie A BIOL
- 25. Gilmore, Kevin R CIVILE
- 26. Gomez-Minambres, Joaquin ECONO
- 27. Griffin, Duane Alan GEOGR
- 28. Gross, Michael D CHEME
- 29. Haussmann, Mark F BIOL
- 30. Hendry, Jamie Ralston MANGT
- 31. Henne-Ochoa, Richard B EDUC
- 32. Henry, Sue Ellen EDUC
- 33. Higgins, Matthew J CIVILE
- 34. Hiller, Tammy B MANGT
- 35. Jansson, Peter M ELECE
- 36. Jones, Janet D CLASS
- 37. Jordan, Stephen D BIOL
- 38. Kazi, Paula M ECONO
- 39. Kell, Anna Kathryn ARTH
- 40. Kelley, David Frederick ELECE

- 41. Kinnaman, Thomas C ECONO
- 42. Kirby, Carl S GEOLG
- 43. Knoedler, Janet T ECONO
- 44. Lentz, Erin Coniker INREL
- 45. Lintott, Sheila M PHILO
- 46. Magee, Christopher Sean ECONO
- 47. Malusis, Michael Adam CIVILE
- 48. Maneval, James E CHEME
- 49. Marchiori, Alan M COMPSC
- 50. Marsh, David GEOGR
- 51. Martin, Eric C MANGT
- 52. Martine, Christopher T BIOL
- 53. McGuire, Molly M CHEM
- 54. McTammany, Matthew Eric BIOL
- 55. Milofsky, Carl SOCIO
- 56. Mordaunt, Christopher J MECHE
- 57. Morris-Keitel, Peter DLCL
- 58. Mulligan, Adrian Neil GEOGR
- 59. Nega, Berhanu ECONO
- 60. Newlin, Jessica Thomas CIVILE
- 61. Paliulis, Leocadia V BIOL
- 62. Prince, Michael J CHEME
- 63. Raymond, Timothy Michael CHEME
- 64. Reeder, DeeAnn Marie BIOL
- 65. Richards, Rosalyn ARTH
- 66. Rock, Melissa Y GEOGR
- 67. Roncallo, Alejandra INREL
- 68. Schmidli, William Michael HIST
- 69. Schneider, Geoffrey ECONO
- 70. Searles, Edmund Quincy SOCIO
- 71. Sharma, Mala M MECHE
- 72. Siegel, Nathan Philip MECHE
- 73. Siewers, Alfred K ENGLI
- 74. Sills, Deborah Lynne CIVILE
- 75. Smith, Ron Joseph INREL
- 76. Snyder, Ryan Charles CHEME
- 77. Snyder, William J CHEME
- 78. Spiro, Mark Douglas BIOL
- 79. Stevenson Sanjian, Andrea POLSC
- 80. Stokes-Brown, Atiya Kai POLSC
- 81. Stowe, Emily Louise BIOL
- 82. Stryker, Peter C MECHE
- 83. Stuhl, Andrew ENVIRO
- 84. Susman, Paul H GEOGR
- 85. Takahashi, Mizuki BIOL
- 86. Temelso, Berhane CHEM
- 87. Toole, T. Michael CIVILE
- 88. Trego, Kristine M CLASS

- 89. Trop, Jeffrey Michael GEOLG
- 90. Ucarer, Emek M INREL
- 91. Wakabayashi, Katsuyuki CHEME
- 92. Westbrook, John Edward DLCL
- 93. White, Carol W RELIG
- 94. White, Nancy E ECONO
- 95. Williamson, Jill Paulette CHEM
- 96. Wilshusen, Peter ENVIRO
- 97. Wolaver, Amy Margaret ECONO
- 98. Wooden, Amanda E ENVIRO
- 99. Zimmerman, Virginia Lee-Alice ENGLI

A brief description of the methodology the institution followed to complete the research inventory:

Student interns studied online details of faculty research interests and accomplishments to determine relevance to sustainability. If the online material was not conclusive then the faculty members were emailed and asked if they thought their research was sustainability-focused, based on the AASHE definition in the STARS manual.

A brief description of notable accomplishments during the previous three years by faculty and/or staff engaged in sustainability research:

DeeAnn Reeder- Identification of deadly fungus that causes white-nose syndrome in bats.

George Shields- high-speed computing to predict how and where water and other molecules will cluster to form clouds. The results may help scientists understand how clouds will affect the pace of climate change.

Nancy White- true economic consequences of the ongoing energy exploration and its long-term effect on local economies where the drilling occurs

Charles Kim & Jamie Hendry-Improve vision in Guatemala

Chris Martine- Burpee Chair in Plant Genetics and Research

The website URL where information about sustainability research is available:

http://www.bucknell.edu/Documents/EnvironmentalCenter/Assessment%20Report%20final.pdf

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution encourages and/or supports sustainability research through one or more of the following:

- An ongoing program to encourage students in multiple disciplines or academic programs to conduct research in sustainability. The
 program provides students with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships,
 financial support, and mentorships. The program specifically aims to increase student sustainability research.
- An ongoing program to encourage faculty from multiple disciplines or academic programs to conduct research in sustainability topics.
 The program provides faculty with incentives to research sustainability. Such incentives may include, but are not limited to, fellowships, financial support, and faculty development workshops. The program specifically aims to increase faculty sustainability research.
- Formally adopted policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions.
- Ongoing library support for sustainability research and learning in the form of research guides, materials selection policies and practices, curriculum development efforts, sustainability literacy promotion, and e-learning objects focused on sustainability.

"---" indicates that no data was submitted for this field

Does the institution have a program to encourage student sustainability research that meets the criteria for this credit?:

Yes

A brief description of the institution's program(s) to encourage student research in sustainability:

The Katherine Mabis McKenna Internship Program sponsors summer internships on environmental topics each year.

The website URL where information about the student research program is available:

http://www.bucknell.edu/x1734.xml

Does the institution have a program to encourage faculty sustainability research that meets the criteria for this credit?:

Yes

A brief description of the institution's program(s) to encourage faculty research in sustainability:

The website URL where information about the faculty research program is available:
http://www.bucknell.edu/x1734.xml
Has the institution formally adopted policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions?: No
A brief description or the text of the institution's policy regarding interdisciplinary research:
The website URL where information about the treatment of interdisciplinary research is available:
Does the institution provide ongoing library support for sustainability research and learning that meets the criteria for this credit?:
No
A brief description of the institution's library support for sustainability research and learning:
The website URL where information about the institution's library support for sustainability is available:

The McKenna Internship program involves faculty and provides stipends to those faculty who supervise student internships.

Responsible Party

Robert Daniel Heuer

Scholarly Communications Officer and Information Access Manager Library & Information Technology

Criteria

Institution has a formally adopted open access policy that ensures that versions of all future scholarly articles by faculty and staff and all future theses and dissertations are deposited in a designated open access repository.

The open access repository may be managed by the institution or the institution may participate in a consortium with a consortial and/or outsourced open access repository.

"---" indicates that no data was submitted for this field

Total number of institutional divisions (e.g. schools, colleges, departments) that produce research:

3

Number of divisions covered by a policy assuring open access to research:

3

A brief description of the open access policy, including the date adopted and repository(ies) used:

The faculty of Bucknell University grant to Bucknell University limited use of their scholarly articles for the purpose of making these articles open access. Specifically, each faculty member grants Bucknell University a nonexclusive, paid-up, worldwide license for each of his or her scholarly articles for the purpose of making these articles openly accessible in an institutional repository, and grants Bucknell University permission to exercise all rights under copyright for this purpose, as well as to authorize other parties to do the same, provided that the articles are not sold for income or profit. A scholarly article is defined as a peer-reviewed scholarly work published in a journal or in another format that a faculty member determines to be appropriate for his or her particular discipline.

A copy of the open access policy:

The open access policy:

The faculty of Bucknell University grant to Bucknell University limited use of their scholarly articles for the purpose of making these articles open access. Specifically, each faculty member grants Bucknell University a nonexclusive, paid-up, worldwide license for each of his or her scholarly articles for the purpose of making these articles openly accessible in an institutional repository, and grants Bucknell University permission to exercise all rights under copyright for this purpose, as well as to authorize other parties to do the same, provided that the articles are not sold for income or profit. A scholarly article is defined as a peer-reviewed scholarly work published in a journal or Campus Sustainability Data Collector | AASHE

in another format that a faculty member determines to be appropriate for his or her particular discipline.

The website URL where the open access repository is available:

http://www.bucknell.edu/library-and-information-technology/library/open-access/open-access-publishing-policy.html

A brief description of how the institution's library(ies) support open access to research:

Research has shown that open access publications tend to be distributed more widely and cited more often than their non-open-access counterparts. With more than 24,000 journals currently in print, no library can have every journal in its collection, meaning that all non-open-access articles miss some of their potential audience.

The website URL where information about open access to the institution's research is available:

http://www.bucknell.edu/x77563.xml

Engagement

Campus Engagement

This subcategory seeks to recognize institutions that provide their students with sustainability learning experiences outside the formal curriculum. Engaging in sustainability issues through co-curricular activities allows students to deepen and apply their understandings of sustainability principles. Institution-sponsored co-curricular sustainability offerings, often coordinated by student affairs offices, help integrate sustainability into the campus culture and set a positive tone for the institution.

In addition, this subcategory recognizes institutions that support faculty and staff engagement, training, and development programs in sustainability. Faculty and staff members' daily decisions impact an institution's sustainability performance. Equipping faculty and staff with the tools, knowledge, and motivation to adopt behavior changes that promote sustainability is an essential activity of a sustainable campus.

Credit
Student Educators Program
Student Orientation
Student Life
Outreach Materials and Publications
Outreach Campaign
Employee Educators Program
Employee Orientation
Staff Professional Development

Student Educators Program

Responsible Party

Dan Remley

Associate Dean of Students Housing Services

Criteria

Institution coordinates an ongoing peer-to-peer sustainability outreach and education program for degree-seeking students. The institution:

- Selects or appoints students to serve as educators and formally designates the students as educators (paid and/or volunteer),
- Provides formal training to the educators in how to conduct outreach, and
- Offers faculty or staff and/or other financial support to the program.

This credit focuses on programs for degree-seeking students enrolled in a for-credit program. Continuing education and/or non-credit students are excluded from this credit.

This credit recognizes ongoing student educator programs that engage students on a regular basis. For example, student educators may be responsible for serving (i.e. directly targeting) a particular subset of students, such as those living in residence halls or enrolled in certain academic subdivisions. Thus, a group of students may be served by a program even if not all of these students avail themselves of the outreach and education offerings.

Sustainability outreach campaigns, sustainability events, and student clubs or groups are not eligible for this credit unless the criteria outlined above are met. These programs are covered by EN 5: Outreach Campaign and EN 3: Student Life.

"---" indicates that no data was submitted for this field

Does the institution coordinate one or more ongoing student, peer-to-peer sustainability outreach and education programs that meet the criteria for this credit?:

No

Number of degree-seeking students enrolled at the institution:

Name of the student educators program (1st program):

Number of students served (i.e. directly targeted) by the program (1st program):

A brief description of the program, including examples of peer-to-peer outreach activities (1st program):
A brief description of how the student educators are selected (1st program):
A brief description of the formal training that the student educators receive (1st program):
A brief description of the financial or other support the institution provides to the program (1st program):

Name of the student educators program (2nd program):
Number of students served (i.e. directly targeted) by the program (2nd program):
A brief description of the program, including examples of peer-to-peer outreach activities (2nd program):
A brief description of how the student educators are selected (2nd program):
A brief description of the formal training that the student educators receive (2nd program):
A brief description of the financial or other support the institution provides to the program (2nd program):

Name of the student educators program (3rd program):
Number of students served (i.e. directly targeted) by the program (3rd program):

A brief description of the program, including examples of peer-to-peer outreach activities (3rd program):
A brief description of how the student educators are selected (3rd program):
A brief description of the formal training that the student educators receive (3rd program):
A brief description of the financial or other support the institution provides to the program (3rd program):
Name(s) of the student educator program(s) (all other programs):
Number of students served (i.e. directly targeted) by all other student educator programs:
A brief description of the program(s), including examples of peer-to-peer outreach activities (all other programs):
A brief description of how the student educators are selected (all other programs):
A brief description of the formal training that the student educators receive (all other programs):
A brief description of the financial or other support the institution provides to the program (all other programs):
Total number of hours student educators are engaged in peer-to-peer sustainability outreach and education activities annually:

The website URL for the peer-to-peer student outrea	ch and education prograi	m(s):	

Responsible Party

Dan Remley

Associate Dean of Students Housing Services

Criteria

Institution includes sustainability prominently in its student orientation activities and programming. Sustainability activities and programming are intended to educate about the principles and practices of sustainability. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).

Because orientation activities vary from one institution to another, prominent inclusion of sustainability may not take the same form on each campus. Prominent inclusion of sustainability may also take different forms for different types of students (e.g. undergraduate students, transfer students, graduate students). When reporting for this credit, each institution will determine what prominent inclusion of sustainability means given its particular context. (See the Credit Example in the STARS Technical Manual.)

As this credit is intended to recognize programming and student learning about sustainability, incorporating sustainability strategies into event planning (e.g. making recycling bins accessible or not serving bottled water) is not, in and of itself, sufficient for this credit. Such strategies may count if they are highlighted and are part of the educational offerings. For example, serving local food would not, in and of itself, be sufficient for this credit; however, serving local food and providing information about sustainable food systems during meals could contribute to earning this credit.

"---" indicates that no data was submitted for this field

The percentage of entering students that are provided an opportunity to participate in orientation activities and programming that prominently include sustainability:

0

A brief description of how sustainability is included prominently in new student orientation:

The website URL where information about sustainability in student orientation is available:

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution has co-curricular sustainability programs and initiatives. The programs and initiatives fall into one or more of the following categories:

- Active student groups focused on sustainability
- Gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems
- Sustainable enterprises that include sustainability as part of their mission statements or stated purposes (e.g. cafés through which students gain sustainable business skills)
- Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills
- · Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience
- · Cultural arts events, installations or performances related to sustainability that have students as the intended audience
- Wilderness or outdoors programs (e.g. that organize hiking, backpacking, kayaking, or other outings for students and follow Leave No Trace principles
- Sustainability-related themes chosen for themed semesters, years, or first-year experiences (e.g. choosing a sustainability-related book for common reading)
- Programs through which students can learn sustainable life skills (e.g. a series of sustainable living workshops, a model room in a
 residence hall that is open to students during regular visitation hours and demonstrates sustainable living principles, or
 sustainability-themed housing where residents and visitors learn about sustainability together)
- Sustainability-focused student employment opportunities offered by the institution
- Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions
- Other co-curricular sustainability programs and initiatives

Multiple programs and initiatives may be reported for each category and each category may include institution-governed and/or student-governed programs.

Submission Note:

Since the performance year, some significant changes to sustainability programming have occurred at the University. Most notably the Bucknell University Environmental Center has changed to the Bucknell Center for Sustainability and the Environment, and the Campus Greening Initiative has changed to the Sustainable Design Program. As a result, the content of the associated websites may reflect these changes.

Does the institution have one or more co-curricular sustainability programs and initiatives that fall into the following categories?:

	Yes or No
Active student groups focused on sustainability	Yes
Gardens, farms, community supported agriculture (CSA) or fishery programs, or urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems	Yes
Student-run enterprises that include sustainability as part of their mission statements or stated purposes	Yes
Sustainable investment funds, green revolving funds or sustainable microfinance initiatives through which students can develop socially, environmentally and fiscally responsible investment and financial skills	Yes
Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience	Yes
Cultural arts events, installations or performances related to sustainability that have students as the intended audience	Yes
Wilderness or outdoors programs that follow Leave No Trace principles	Yes
Sustainability-related themes chosen for themed semesters, years, or first-year experiences	Yes
Programs through which students can learn sustainable life skills	No
Sustainability-focused student employment opportunities offered by the institution	Yes

Graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions	No
Other co-curricular sustainability programs and initiatives	Yes

The name and a brief description of each student group focused on sustainability:

Bucknell Environmental Club: This group provides Earth Day programming and raises awareness on campus sustainability issues, such as plastic bags and bottled water. They provide volunteers to dining services for sustainability initiatives in that department. Engineers for Sustainable Development: student run group that promotes sustainable development and practice both throughout campus and on a global scale.

Bucknell Green Builders- foster scientific study and research in the field of environmentally sustainable building, investigate ways to improve current methods and designs through case studies, and preparing for the LEED Green Associate Exam.

Net Impact- networking opportunity for Bucknell students who are seeking internships and jobs in sustainability, as well as experience in local community development through small businesses and charitable organizations

The website URL where information about student groups is available:

http://www.bucknell.edu/x45724.xml

A brief description of gardens, farms, community supported agriculture (CSA) or fishery programs, and urban agriculture projects where students are able to gain experience in organic agriculture and sustainable food systems:

At the Bucknell University Environmental Center there is an organic garden consisting of 15 raised beds which contain seasonal vegetables, strawberries, herbs. The garden also has an apple orchard and established grape vines. The garden is used as a laboratory for the course "Food and the Environment" and also serves as a communal garden for Bucknell staff who wish to grow their own food.

There also is a Lewisburg Community Garden organized through Bucknell's Office of Civic Engagement, with the goals of increasing access to fresh, healthy, low-cost, locally grown food and educating students and community members about home gardening benefits and techniques. Creating cooperative, multi-generational learning opportunities between campus and local community.

The website URL where information about the organic agriculture and/or sustainable food systems projects and initiatives is available:

http://www.bucknell.edu/x73681.xml

A brief description of student-run enterprises that include sustainability as part of their mission statements or stated purposes:

Bucknell Advancing Communities Educating and Serving (BACES): a student-led service organization that travels down to the Dominican Republic over spring break to participate in a wide variety of service projects such as medical outreaches, food drives, building homes and teaching in a local school.

MGMT 101: Students create non profit companies to benefit local community or service projects.

Bucknell Brigade: providing emergency relief efforts following the devastation of Hurricane Mitch, the university has been involved in a unique partnership with a resettlement community outside the capital city of Managua, Nicaragua.

The website URL where information about the student-run enterprise(s) is available:

https://getinvolved.bucknell.edu/organization/BACES

A brief description of the sustainable investment or finance initiatives:

Bucknell University Green Fund provides start-up money for sustainability projects that are proposed and implemented by students, faculty and staff. (Students are on governing board but are not sole governors)

The website URL where information about the sustainable investment or finance initiatives is available:

https://www.bucknell.edu/x61004.xml

A brief description of conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience:

Numerous events are held each year on a sustainability themes. Within the past year Bucknell has hosted a Susquehanna River Symposium, an Sustainability Symposium, a Green Screens Film Series, and a Renewable Energy Workshop.

Sustainability Symposium: This event is organized annually with the goal of focusing the campus community's attention on local, regional, and global sustainability issues. In 2013 the day-long event included themed panel discussions by faculty, a poster and project display session, a presentation about a local rail-trail project, a demonstration of unique human-powered vehicles, and a keynote address by best-selling author Juliet Schor.

The website URL where information about the event(s) is available:

http://www.bucknell.edu/news-and-media/current-news/2014/march/bucknell-to-host-sustainability-symposium-march-27.html

A brief description of cultural arts events, installations or performances related to sustainability that have students as the intended audience:

A recent sampling of performances focused on cultural diversity and sustainability themes includes:

Pedrito Martinez Group- An ensemble with roots planted firmly in the rumba tradition, performing bata rhythms and vocal chants of Yoruban and Santerian music.

Aparna Ramaswamy- Indian-American artists of the next generation who retain roots in their collective history while bringing their own voices to the contemporary stage.

The Strike Anywhere Performance Ensemble's presentation of "Same River," a multimedia exploration of Marcellus Shale hydrofracturing.

The website URL where information about the cultural arts event(s) is available:

https://www.bucknell.edu/arts-and-performance/

A brief description of wilderness or outdoors programs for students that follow Leave No Trace principles:

Bucknell Outdoor Education and Leadership provides a wide variety of opportunities for students to engage in outdoor activities including a ropes course, an outdoor club, international expeditions, and an outdoor pre-orientation program known as BuckWILD. The university also maintains a boat landing on campus for river-based excursions, and a campus-wide bike sharing program.

The website URL where information about the wilderness or outdoors program(s) is available:

http://www.bucknell.edu/x33763.xml

A brief description of sustainability-related themes chosen for themed semesters, years, or first-year experiences:

Three of Bucknell's residential colleges for first-year students have themes directly related to sustainability. These colleges and their learning outcomes are listed below:

The Social Justice Residential College: Understand the perspectives of marginalized populations. Critically and compassionately examine issues of social justice. Examine topics including poverty, inequality, health care, immigration, LGBT issues and civil rights. Learn about grassroots activism. Advocate for social justice in the community.

Environmental Residential College- Explore the ecological impact of human activities. Learn about successes in sustainable development. Raise awareness about environmental issues. Celebrate the wonder of the natural world. Study the complex scientific, social, political and ethical dimensions of environmental issues.

Global Residential College- Explore issues related to globalization and culture in this interconnected age. Learn how the modern world came to be and understand its successes and problems. Learn how to initiate change. Challenge your beliefs and look beyond the conventional.

The website URL where information about the theme is available:

https://www.bucknell.edu/x67929.xml

A brief description of program(s) through which students can learn sustainable life skills:

The website URL where information about the sustainable life skills program(s) is available:

A brief description of sustainability-focused student employment opportunities:

Bucknell University Environmental Center: Provides employment opportunities for students to work with faculty on research projects and other sustainable initiatives (such as AASHE STARS)

The website URL where information about the student employment opportunities is available:

http://www.bucknell.edu/x79715.xml

A brief description of graduation pledges through which students pledge to consider social and environmental responsibility in future job and other decisions:

The website URL where information about the graduation pledge program is available:

A brief description of other co-curricular sustainability programs and initiatives:

Campus Greening Initiative: Facilitate the integration of sustainability throughout the curriculum, and provide experiential learning opportunities focused human connections to the natural world, Support student-centered research and analysis that contributes to the increased ecological, economic, and social sustainability of the University, Provide direction and leadership to collaborative campus sustainability projects by creating linkages among curricular, administrative, and operational units across campus.

Susquehanna River: integrate research, teaching, and outreach focused on the Susquehanna River

Place Studies Initiative: The Place Studies Program provides opportunities to understand, represent, and engage natural and human communities by:

Advancing understandings and applications of sustainability for rural communities

Exploring how to characterize and represent places in the digital age

Encouraging creative expressions and articulations of human-nature relationships

The website URL where information about other co-curricular sustainability programs and initiatives is available:

http://www.bucknell.edu/x3564.xml

Outreach Materials and Publications

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution produces outreach materials and/or publications that foster sustainability learning and knowledge. The publications and outreach materials may include the following:

- A central sustainability website that consolidates information about the institution's sustainability efforts
- A sustainability newsletter
- Social media platforms (e.g. Facebook, Twitter, interactive blogs) that focus specifically on campus sustainability
- A vehicle to publish and disseminate student research on sustainability
- Building signage that highlights green building features
- · Food service area signage and/or brochures that include information about sustainable food systems
- · Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed
- A sustainability walking map or tour
- A guide for commuters about how to use alternative methods of transportation
- Navigation and educational tools for bicyclists and pedestrians (e.g. covering routes, inter-modal connections, policies, services, and safety)
- · A guide for green living and incorporating sustainability into the residential experience
- Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat
- Other

A single outreach material or publication that serves multiple purposes may be counted more than once. For example, a sustainability website that includes tools for bicyclists and pedestrians may be counted in both categories.

Submission Note:

Since the performance year, some significant changes to sustainability programming have occurred at the University. Most notably the Bucknell University Environmental Center has changed to the Bucknell Center for Sustainability and the Environment, and the Campus Greening Initiative has changed to the Sustainable Design Program. As a result, the content of the associated websites may reflect these changes.

"---" indicates that no data was submitted for this field

Does the institution produce the following outreach materials and/or publications that foster sustainability learning and knowledge? :

	Yes or No
A central sustainability website that consolidates information about the institution's sustainability efforts	Yes
A sustainability newsletter	No
Social media platforms that focus specifically on campus sustainability	Yes
A vehicle to publish and disseminate student research on sustainability	Yes
Building signage that highlights green building features	Yes
Food service area signage and/or brochures that include information about sustainable food systems	Yes
Signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed	Yes
A sustainability walking map or tour	Yes
A guide for commuters about how to use alternative methods of transportation	No
Navigation and educational tools for bicyclists and pedestrians	No
A guide for green living and incorporating sustainability into the residential experience	No
Regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat	No
Other sustainability publications or outreach materials not covered above	Yes

A brief description of the central sustainability website:

The Bucknell University Environmental Center provides links to most environmental sustainability efforts on campus, both academic and operational.
The website URL for the central sustainability website:
http://www.bucknell.edu/environmentalcenter
A brief description of the sustainability newsletter:

The website URL for the sustainability newsletter:
A brief description of the social media platforms that focus specifically on campus sustainability:
The Bucknell University Environmental Center maintains and regularly updates a Facebook page.
The website URL of the primary social media platform that focuses on sustainability:
https://www.facebook.com/BucknellEnvironmentalCenter
A brief description of the vehicle to publish and disseminate student research on sustainability:
The Bucknell University Environmental Center works with Bucknell's communications department to regularly feature student research on the University's news page.
The website URL for the vehicle to publish and disseminate student research on sustainability:
http://www.bucknell.edu/environmentalcenter
A brief description of building signage that highlights green building features :
Educational signage is in place at the Environmental Center and Dana Engineering Building explain the native plants gardens and green roof.
The website URL for building signage that highlights green building features :
A brief description of food service area signage and/or brochures that include information about sustainable food systems:
Signage in Bostwick Dining Hall indicates the sourcing locations for local foods.

The website URL for food service area signage and/or brochures that include information about sustainable food systems:
A brief description of signage on the grounds about sustainable groundskeeping and/or landscaping strategies:
The Environmental Center has signage explaining its native plants garden and the virtues of sustainable landscaping.
The website URL for signage on the grounds about sustainable groundskeeping and/or landscaping strategies: http://www.bucknell.edu/x45652.xml
A brief description of the sustainability walking map or tour:
Bucknell has an Arboretum tour focused on the biodiversity of campus trees, and there is also a brochure guiding guests through sustainable backyard tour for the Environmental Center.
The website URL of the sustainability walking map or tour:
http://www.bucknell.edu/arboretum/
A brief description of the guide for commuters about how to use alternative methods of transportation:
The website URL for the guide for commuters about how to use alternative methods of transportation:
A brief description of the navigation and educational tools for bicyclists and pedestrians:

The website URL for navigation and educational tools for bicyclists and pedestrians:
A brief description of the guide for green living and incorporating sustainability into the residential experience:
The website URL for the guide for green living and incorporating sustainability into the residential experience:
A brief description of regular coverage of sustainability in the main student newspaper, either through a regular

column or a reporter assigned to the sustainability beat:

The website URL for regular coverage of sustainability in the main student newspaper, either through a regular column or a reporter assigned to the sustainability beat:

A brief description of another sustainability publication or outreach material not covered above (1st material):

Bucknell's Environmental Center Website provides information on the Marcellus Shale Initiative. The Marcellus Shall initiative supports objective research, provides a primarily print-based publications database, and critically evaluates information related to the Marcellus Shale natural gas play.

The website URL for this material (1st material):

http://www.bucknell.edu/centers-institutes-and-resources/environmental-center/marcellus-shale-initiative.html

Does the institution produce another sustainability publication or outreach material not covered above? (2nd material):

Yes

A brief description of this material (2nd material):

Bucknell's Environmental Center Website provides information on the Place Studies Initiative. The Place Studies Initiative undertakes and supports research within the social sciences and environmental humanities that examines the nature and role of place in human experience. The purpose of the Place Studies Initiative is to facilitate and encourage research on the human dimensions of environmental issues. We do so through an array of projects we locate within three focus areas.

The website URL for this material (2nd material):

http://www.bucknell.edu/PlaceStudiesInitiative

Does the institution produce another sustainability publication or outreach material not covered above? (3rd material):

Yes

A brief description of this material (3rd material):

Bucknell's Environmental Center Website provides information on the Susquehanna River Initiative. The Susquehanna River Initiative (SRI) is a major program of the Bucknell University Environmental Center (BUEC) to integrate research, teaching, and outreach focused on the Susquehanna River. The development of this initiative is largely funded by the Henry Luce Foundation.

The website URL for this material (3rd material):

http://www.bucknell.edu/SRI

Does the institution produce another sustainability publication or outreach material not covered above? (4th material):

Yes

A brief description of this material (4th material):

Bucknell Facilities provides information on the environmental benefits of its co-gen power plant. In 1998 Bucknell's power plant was converted from a conventional coal-burning facility to a co-generation power plant fueled by natural gas. The co-gen facility captures and reuses waste heat for an overall efficiency is 75-80%, which is exceptionally high compared to conventional power plants. The co-gen power plant has also led to a 40% reduction in the university's greenhouse gas emissions.

The website URL for this material (4th material):

http://www.bucknell.edu/facilities/utilities/power-plant.html

Does the institution produce another sustainability publication or outreach material not covered above? (5th material):

Yes

A brief description of this material (5th material):

A Comprehensive Environmental Assessment of Bucknell University: In 2007, a group of over 70 Bucknell students, faculty, staff, and community members embarked upon a collaborative campus-wide investigation of the University's environmental impact. Organized into ten assessment teams, participants in this project delved into a myriad of questions relating to the environmental sustainability of the University's policies and practices, including such indicators as administration and policy, education, energy, water, waste, purchasing, dining, built environment, and landscape. Now, after eighteen months of research and editing, this comprehensive assessment is available to the campus community and the public.

The website URL for this material (5th material):

http://www.bucknell.edu/Documents/EnvironmentalCenter/Assessment%20Report%20final.pdf

Does the institution produce another sustainability publication or outreach material not covered above? (6th material):

Yes

A brief description of this material (6th material):

Bucknell Facilities provides information on its recycling initiatives. Bucknell began its recycling program in 1971 with cardboard and newspaper, and now recycles over 17 different materials including aluminum, metal, glass, plastic, cardboard, office paper, computers, ink jet and toner cartridges, yard waste, rubber, solvents, oil, antifreeze, batteries, furniture, fluorescent tubes, and wooden construction debris. Bucknell Facilities maintains a recycling web page with guidelines as to which materials may be recycled, and how recycled Campus Sustainability Data Collector | AASHE Snapshot | Page 59

materials should be treated and sorted.

The website URL for this material (6th material):

http://www.bucknell.edu/Recycling

Does the institution produce another sustainability publication or outreach material not covered above? (7th material):

Yes

A brief description of this material (7th material):

Bucknelll Facilities provides information on the green custodial initiatives. The custodial staff have been proactively investigating green cleaning options and systematically initiating the most economic, eco-friendly, and effective cleaning materials for over ten years.

this information is available on a link on the website below

The website URL for this material (7th material):

http://www.bucknell.edu/script/search/?q=green+cleaning

Does the institution produce another sustainability publication or outreach material not covered above? (8th material):

Yes

A brief description of this material (8th material):

Bucknell's dining has a website outlining their sustainable initiatives including becoming tray less, composting, and using local food sources amongst other instated establishments.

The website URL for this material (8th material):

http://www.bucknell.edu/dining-services/sustainable-dining.html

Outreach Campaign

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Part 1

Institution holds at least one sustainability-related outreach campaign directed at students that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution, a student organization, or students in a course.

Part 2

Institution holds at least one sustainability-related outreach campaign directed at employees that yields measurable, positive results in advancing sustainability. The sustainability-related outreach campaign may be conducted by the institution or an employee organization.

The campaign(s) reported for this credit could take the form of a competition (e.g. a residence hall conservation competition), a rating or certification program (e.g. a green labs or green office program), and/or a collective challenge (e.g. a campus-wide drive to achieve a specific sustainability target). A single campus-wide campaign may meet the criteria for both parts of this credit if educating students is a prime feature of the campaign and it is directed at both students and employees.

To measure if a campaign yields measurable, positive results, institutions should compare pre-campaign performance to performance during or after the campaign. The following impacts are not sufficient for this credit:

- Increased awareness
- Additional members of a mailing list or group

"---" indicates that no data was submitted for this field

Has the institution held at least one sustainability-related outreach campaign directed at students within the previous three years that has yielded measurable, positive results in advancing sustainability?:

Yes

Has the institution held at least one sustainability-related outreach campaign directed at employees within the previous three years that has yielded measurable, positive results in advancing sustainability?:

Yes

The name of the campaign (1st campaign):

Flex Your Power

A brief description of the campaign (1st campaign):

Flex Your Power is a yearly energy conservation competition for most residence halls and fraternities. The competition has been taking place since 2011.

A brief description of the measured positive impact(s) of the campaign (1st campaign):

Winning residence halls have achieved reductions in electricity use of over 10% during the weeks measured.

The website URL where information about the campaign is available (1st campaign):

http://www.bucknell.edu/x45724.xml

The name of the campaign (2nd campaign):

Recyclemania

A brief description of the campaign (2nd campaign):

Bucknell participates annually in RecycleMania, a friendly competition and benchmarking tool for college and university recycling programs to promote waste reduction activities to their campus communities. Over an 8-week period each spring, colleges across the United States and Canada report the amount of recycling and trash collected each week and are in turn ranked in various categories based on who recycles the most on a per capita basis, as well as which schools have the best recycling rate as a percentage of total waste and which schools generate the least amount of combined trash and recycling. With each week's updated ranking, participating schools follow their performance against other colleges and use the results to rally their campus to reduce and recycle more.

A brief description of the measured positive impact(s) of the campaign (2nd campaign):

Recylemania has resulted in the cumulative GHG reduction of 237 metric Tons of CO2.

The website URL where information about the campaign is available (2nd campaign):

http://www.recyclemaniacs.org/scoreboard/participating-schools/list?geo_aa=PA&node_id=10464

A brief description of other outreach campaigns, including measured positive impacts:

During the past three years, Bucknell Communications has created specific outreach campaigns, directed at all members of the campus community, to encourage recycling and power shut-offs during breaks.

Employee Educators Program

Responsible Party

Marcia Hoffman

Executive Director Human Resources
Human Resources

Criteria

Institution administers or oversees an ongoing faculty/staff peer-to-peer sustainability outreach and education program.

In the program, employee sustainability educators are formally designated and receive formal training or participate in an institution-sponsored orientation. The institution offers financial or other support to the program.

This credit recognizes ongoing programs that engage employees on a regular basis. For example, employee educators may represent or be responsible for engaging workers in certain departments or buildings. Thus, a group of employees may be served (i.e. directly targeted) by a program even if not all of these employees avail themselves of the outreach and education offerings.

Training and/or professional development opportunities in sustainability for staff are excluded from this credit. These activities are covered in *EN 8: Staff Professional Development*.

Submission Note:

No such employee education program exists.

"---" indicates that no data was submitted for this field

Does the institution administer or oversee an ongoing faculty/staff peer-to-peer sustainability outreach and education program that meets the criteria for this credit?:

No

Total number of employees:

1,203

Name of the employee educators program (1st program):

N/A

Number of employees served by the program (1st program):

0

A brief description of how the employee educators are selected (1st program):

A brief description of the formal training that the employee educators receive (1st program):
A brief description of the staff and/or other financial support the institution provides to the program (1st program):
The website URL where information about the program is available (1st program):
Name of the employee educators program (2nd program):
Number of employees served by the program (2nd program):
A brief description of how the employee educators are selected (2nd program):
A brief description of the formal training that the employee educators receive (2nd program):
A brief description of the financial or other support the institution provides to the program (2nd program):
The website URL where information about the program is available (2nd program):
Name(s) of the employee educator program(s) (all other programs):
Number of employees served by all other programs:
A brief description of how the employee educators are selected (all other programs):

A brief description of the formal training that the employee educators receive (all other programs):

A brief description of the staff and/or other financial support the institution provides to the program(s) (all other programs):
The website URL where information about the program(s) is available (all other programs):

Employee Orientation

Responsible Party

Marcia Hoffman

Executive Director Human Resources
Human Resources

Criteria

Institution covers sustainability topics in new employee orientation and/or in outreach and guidance materials distributed to new employees, including faculty and staff. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).

"---" indicates that no data was submitted for this field

The percentage of new employees that are offered orientation and/or outreach and guidance materials that cover sustainability topics:

80

A brief description of how sustainability is included in new employee orientation:

A sustainability session is offered during the Getting to Know Bucknell component of orientation. This component is not required, but strongly encouraged by all staff to attend and is offered approximately every three months. The Director of the Campus Greening Initiative provides staff with information on best practices, current projects, and ongoing training opportunities. Staff are directed to the Campus Greening website which provides this information in summary as well as more background information for staff who are interested.

The website URL where information about sustainability in new employee orientation is available:

http://www.bucknell.edu/x3564.xml

Staff Professional Development

Responsible Party

Marcia Hoffman

Executive Director Human Resources
Human Resources

Criteria

Institution makes available training and/or other professional development opportunities in sustainability to all staff at least once per year.

Separate training opportunities for each department would count for this credit, as long as each staff member has an opportunity to learn about sustainability at least once per year. It is not necessary that each staff member attend such trainings; the credit is based on making training available to all staff.

This credit applies to staff members only; it does not include faculty members.

The following training opportunities are not sufficient for this credit:

- Specialized training for a small group of staff
- The opportunity to participate in an institutional sustainability committee or group

Submission Note:

Since the performance year, some significant changes to sustainability programming have occurred at the University. Most notably the Bucknell University Environmental Center has changed to the Bucknell Center for Sustainability and the Environment, and the Campus Greening Initiative has changed to the Sustainable Design Program. As a result, the content of the associated websites may reflect these changes.

"---" indicates that no data was submitted for this field

Does the institution make available training and/or other professional development opportunities in sustainability to all staff at least once per year?:

Yes

A brief description of the sustainability trainings and professional development opportunities available to staff:

The Bucknell Environmental Center promotes weekly Green Bag Lunch seminars to provide an opportunity for university students, alumni, faculty, and staff to share current research and projects and/or discuss current issues related to sustainability and the environment.

For the past two years, Bucknell has held an annual Sustainability Symposium, which has featured panel discussions, presentations, and outdoor demonstrations. The keynote presentation from this past year was "Plenitude: The New Economics of Sustainability," by Juliet Schor, Professor of Sociology at Boston College. All faculty and staff are encouraged to attend.

The percentage of staff that participated in training and/or other professional development opportunities in sustainability during the previous year:
The website URL where information about staff training opportunities in sustainability is available:
http://www.bucknell.edu/EnvironmentalCenter

Public Engagement

This subcategory seeks to recognize institutions that help catalyze sustainable communities through public engagement, community partnerships and service. Engagement in community problem-solving is fundamental to sustainability. By engaging with community members and organizations in the governmental, non-profit and for-profit sectors, institutions can help solve sustainability challenges. Community engagement can help students develop leadership skills while deepening their understandings of practical, real-world problems and the process of creating solutions. Institutions can contribute to their communities by harnessing their financial and academic resources to address community needs and by engaging community members in institutional decisions that affect them. In addition, institutions can contribute toward sustainability broadly through inter-campus collaboration, engagement with external networks and organizations, and public policy advocacy.

Credit
Community Partnerships
Inter-Campus Collaboration
Continuing Education
Community Service
Community Stakeholder Engagement
Participation in Public Policy
Trademark Licensing
Hospital Network

Community Partnerships

Responsible Party

Brandn Green

Director Place Studies Program
Center for Sustainability and the Environment

Criteria

Institution has one or more formal partnership(s) with the local community, including school districts, government agencies, non-profit organizations, businesses and/or other entities, to work together to advance sustainability within the community.

Each partnership conforms to one of the following types:

Type of Partnership	Indicators
A. Supportive	 Scope: Addresses a sustainability topic or a specific aspect of sustainability (e.g. community garden, environmental remediation, community environmental health and education) Duration: May be time-limited (short-term projects and events), multi-year, or ongoing Commitment: Institutional involvement may include financial and/or staff support or may be limited to resource sharing and/or endorsement Governance: Campus and community leaders or representatives are engaged in program/project development
B. Collaborative	 Scope: Addresses one or more sustainability challenge and may simultaneously support social equity and wellbeing, economic prosperity, and ecological health (e.g. a green jobs program in an economically disadvantaged neighborhood) Duration: May be time-limited, multi-year, or ongoing Commitment: Institution provides faculty/staff, financial, and/or material support Governance: Campus and local community members are both engaged in program/project development, from agenda setting and planning to decision-making, implementation and review

An institution may have multiple partnerships of each type, however no single partnership may be both supportive and collaborative, collaborative and transformative, or supportive and transformative.

Recognizing the diversity of forms that community partnerships may take, it is not required that a partnership meet all of the criteria listed to be considered supportive or collaborative. A partnership must meet all of the criteria listed to be considered transformative, however. For further guidance in identifying community partnerships that meet the criteria for each type, see the Credit Example in the STARS Technical Manual.

This credit recognizes campus-community partnerships that advance sustainability in an explicit and participatory way. Participatory, community-based research and engaged scholarship around issues of sustainability may be included if it involves formal partnership(s). Although community service activities (e.g. academic service learning, co-curricular service learning and volunteer activities, Work-Study community service and paid community service internships) may involve local partnerships and contribute toward sustainability, they are not included in this credit. Community service is covered by *EN 12: Community Service*.

Submission Note:

The single website URL is not feasible for this module as the projects on campus are diverse and information about them is available on a variety of sites. For now, I have put down the Environmental Center webpage, with the expectation that this site will function as a hub to other sites within the University web universe.

Since the performance year, some significant changes to sustainability programming have occurred at the University. Most notably the Bucknell University Environmental Center has changed to the Bucknell Center for Sustainability and the Environment, and the Campus Greening Initiative has changed to the Sustainable Design Program. As a result, the content of the associated websites may reflect these changes.

"---" indicates that no data was submitted for this field

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as "supportive"?:

Yes

A brief description of the institution's supportive sustainability partnership(s) with the local community:

The Lewisburg community garden was initiated through the Office of Civic Engagement and Service Learning as a collaboration with the borough of Lewisburg. It has proven to be a successful, supportive, relationship. This relationship began in 2013 and is on-going.

Does the institution have at least one formal sustainability partnership with the local community that meets the

criteria as "collaborative"?:

Yes

A brief description of the institution's collaborative sustainability partnership(s):

The Place Studies Program of the Bucknell Environmental Center has helped to create the Susquehanna Valley Research Consortium. Through this effort, the university provides staff, student, and faculty support and leadership alongside the directors of United Ways throughout the region. We have developed a data-driven support network, where we provide research on and about social issues which the United Ways are engaged with as a tool for evaluating community impacts. Our work with this consortium operates across multiple sustainability dimensions, including health, housing, education, exposure to toxins and natural resources.

Does the institution have at least one formal sustainability partnership with the local community that meets the criteria as "transformative"?:

No

A brief description of the institution's transformative sustainability partnership(s) with the local community:

A brief description of the institution's sustainability partnerships with distant (i.e. non-local) communities:

We have a range of non-local sustainability partnerships. In Nicaragua, Bucknell has been actively involved with a community-based development and in-depth education program since 1999. More recently, the members of the Management for Sustainability program have developed a multidisciplinary projects in Guatamala called "Project for Sustainable Eye Care" (PRoSEC). In this program, faculty from Management and Engineering work together to create cost effective eye glasses.

The website URL where information about sustainability partnerships is available:

http://www.bucknell.edu/EnvironmentalCenter

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution collaborates with other colleges and universities to support and help build the campus sustainability community.

See the Credit Example in the STARS Technical Manual for guidance on identifying appropriate collaborations.

"---" indicates that no data was submitted for this field

Does the institution collaborate with other colleges and universities to support and help build the campus sustainability community?:

Yes

A brief summary of papers, guides, presentations, and other resources the institution has developed to share their sustainability experience with other institutions:

Bucknell is a member of the Pennsylvania Environmental Resource Consortium, a statewide organization that allows colleges and universities to share information and strategies on campus sustainability. Representatives of Bucknell regularly present at their meetings.

The names of local, state/provincial, regional, national, or international campus sustainability organizations or consortia in which the institution participates and/or is a member:

Pennsylvania Environmental Resource Consortium, Association for the Advancement of Sustainability in Higher Education.

A brief summary of additional ways the institution collaborates with other campuses to advance sustainability:

Bucknell University periodically hosts meetings of the Pennsylvania Environmental Resource Consortium (PERC). In 2011 Bucknell hosted a PERC conference on sustainability across the curriculum, and in 2015 it will be hosting PERC's student sustainability symposium.

The website URL where information about cross-campus collaboration is available:

Continuing Education

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Part 1

Institution offers continuing education courses that address sustainability.

Courses that address sustainability include continuing education sustainability courses and continuing education courses that include sustainability. Courses that can be taken for academic credit are not included in this credit. They are covered by the Curriculum subcategory.

Part 2

Institution has at least one sustainability-themed certificate program through its continuing education or extension department.

Degree-granting programs (e.g. programs that confer Baccalaureate, Masters, and Associates degrees) and certificates that are part of academic degree programs are not included in this credit. They are covered in the Curriculum subcategory.

This credit was marked as **Not Applicable** for the following reason:

Institution does not offer continuing education or community education programs.

Responsible Party

Lynn Pierson

Assistant Director Community Service
Civic Engagement
Criteria
Part 1
Institution engages its student body in community service, as measured by the percentage of students who participate in community service.
Part 2
Institution engages students in community service, as measured by the average hours contributed per full-time student per year.
Institutions may exclude non-credit, continuing education, and/or part-time students from this credit.
"" indicates that no data was submitted for this field
Number of students engaged in community service: 3,100
Total number of students: 3,527
Does the institution wish to pursue Part 2 of this credit (community service hours)?: Yes
Total number of student community service hours contributed during a one-year period: 62,467
Does the institution include community service achievements on student transcripts?:
A brief description of the practice of including community service on transcripts, if applicable:

Yes
A brief description of the institution's employee community service initiatives:
Staff members can take time away, without using their vacation time, to engage in local service opportunities or participate on a service trip.
The website URL where information about the institution's community service initiatives is available:
https://www.bucknell.edu/about-bucknell/administrative-offices/civic-engagement.html

Does the institution provide incentives for employees to participate in community service (on- or off-campus)?:

Community Stakeholder Engagement

Responsible Party

Brandn Green

Director Place Studies Program
Center for Sustainability and the Environment

Criteria

Institution has adopted a framework for community stakeholder engagement in governance, strategy and operations. The framework includes:

1) Policies and procedures that ensure community stakeholder engagement is applied systematically and regularly across the institution's activities (e.g. planning and development efforts, capital investment projects, and/or other activities and decisions that affect the broader community)

And

2) Established practices to identify and engage relevant community stakeholders, including any vulnerable or underrepresented groups.

Frameworks adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

This credit does not include the engagement of internal campus stakeholders (e.g. students, faculty and staff); internal stakeholder engagement is covered in *PA 3: Governance*.

"---" indicates that no data was submitted for this field

Has the institution adopted a framework for community stakeholder engagement in governance, strategy and operations?:

Yes

A brief description of the policies and procedures that ensure community stakeholder engagement is applied systematically and regularly across the institution's activities:

Both of the main community stakeholder groups on campus, the Center for Civic Engagement and Service Learning, as well as the Place Studies Program of the Bucknell Environmental Center both present community partners with agreements of association. In these agreements, expectations of the interactions between University officials and community stakeholder groups are stated. Neither entity, to my knowledge, uses a formalized framework that has been developed at the University level. Rather, the procedures and policies are decentralized.

A brief description of how the institution identifies and engages community stakeholders, including any vulnerable or

underrepresented groups:
Community-based research projects all undergo IRB approval. In this way, vulnerable or underrepresented groups are protected.
List of identified community stakeholders:
Too many to list. Please follow the attached URL:
https://www.bucknell.edu/script/civicengagement/communitypartners/information.aspx
A brief description of successful community stakeholder engagement outcomes from the previous three years:
The website URL where information about the institution's community stakeholder engagement framework and activities is available:
https://www.bucknell.edu/script/civicengagement/communitypartners/information.aspx

Participation in Public Policy

Responsible Party

Brandn Green

Director Place Studies Program
Center for Sustainability and the Environment

Criteria

Institution advocates for national, state/provincial, or local public policies that support campus sustainability or that otherwise advance sustainability.

The policy advocacy must be done by the institution, not by students or a student group. This credit acknowledges institutions that advocate for policy changes and legislation to advance sustainability broadly. Advocacy efforts that are made exclusively to advance the institution's interests or projects may not be counted. For example, advocating for government funding for campus sustainability may be counted, whereas lobbying for the institution to receive funds that have already been appropriated may not.

"---" indicates that no data was submitted for this field

Does the institution advocate for national, state/provincial, or local public policies that support campus sustainability or that otherwise advance sustainability?:

Yes

A brief description of how the institution engages in public policy advocacy for sustainability, including the issues, legislation, and ordinances for or against which the institution has advocated:

Individuals within the University take a myriad of public policy advocacy positions through research and in bringing relevant speakers to campus. In addition, the University has taken a pro-sustainability stand by including sustainability as one of five tenants of the capital campaign. This is not issue specific, but includes a broad commitment to integrating sustainability in the mission of the University.

A brief description of other political positions the institution has taken during the previous three years:

A brief description of political donations the institution made during the previous three years (if applicable):

The website URL where information about the institution's advocacy efforts is available:

Trademark Licensing

Criteria

Institution is a member of the Fair Labor Association (FLA) and/or the Worker Rights Consortium (WRC).

This credit was marked as **Not Pursuing** so Reporting Fields will not be displayed.

Responsible Party

Brandn Green

Director Place Studies Program Center for Sustainability and the Environment

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Institution's affiliated hospital or health system is a member of the Global Green and Healthy Hospitals Network, the Healthier Hospitals Initiative and/or Practice Greenhealth.

This credit includes hospitals and health systems that are formally affiliated with a higher education institution (sometimes called "university hospitals"). Other types of health care providers (e.g. insurers through which an institution obtains health care for its employees) are not included.

field

	"" indicates that no data was submitted for this
Is the institution a member of the Global Green and Healthy Hospitals Ne	twork?:
Is the institution a member of the Healthier Hospitals Initiative?:	
No Is the institution a member of Practice Greenhealth?:	
No	
A brief description of the hospital's sustainability initiatives:	
The website URL where information about the hospital's sustainability in	itiatives is available:

Operations

Air & Climate

This subcategory seeks to recognize institutions that are measuring and reducing their greenhouse gas and air pollutant emissions. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, and spread of diseases. The impacts are particularly pronounced for low-income communities and countries. In addition, institutions that inventory and take steps to reduce their air pollutant emissions can positively impact the health of the campus community, as well as the health of their local communities and regions.

Credit	
Greenhouse Gas Emissions	
Outdoor Air Quality	

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Part 1

Institution has conducted a publicly available greenhouse gas (GHG) emissions inventory that includes, at minimum, Scope 1 and Scope 2 GHG emissions and may also include Scope 3 GHG emissions. The inventory may be validated internally by campus personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party.

Part 2

Institution reduced its adjusted net Scope 1 and Scope 2 GHG emissions per weighted campus user compared to a baseline.

Part 3

Institution's annual adjusted net Scope 1 and Scope 2 GHG emissions are less than the minimum performance threshold of 0.02 metric tons of carbon dioxide equivalent (MtCO2e) per gross square foot (0.002 MtCO2e per gross square metre) of floor area.

Performance for Part 3 of this credit is assessed using EUI-adjusted floor area, a figure that accounts for significant differences in energy use intensity (EUI) between types of building space.

For this credit, the following carbon offsets may be counted:

- 1. Institution-catalyzed carbon offsets (popularly known as "local offsets")
- 2. Carbon sequestration due to land that the institution manages specifically for sequestration (as documented in policies, land management plans or the equivalent)
- 3. Carbon storage from on-site composting
- 4. Third-party verified purchased carbon offsets

Purchased Renewable Energy Certificates (RECs) that are either Green-e Energy certified or meet Green-e Energy's technical requirements and are verified as such by a third party may be counted as zero emissions energy for purposes of Scope 2 GHG accounting.

Purchased carbon offsets and RECs that have not been third-party verified do not count.

Institutions that have sold or transferred emissions reductions, e.g. in the form of verified emissions reductions (VERs), may not count those reductions toward this credit.

"---" indicates that no data was submitted for this field

Does the institution's GHG emissions inventory include all Scope 1 and Scope 2 GHG emissions?:

Yes

Does the institution's GHG emissions inventory include all Scope 3 GHG emissions from any of the following categories?:

	Yes or No
Business travel	Yes
Commuting	Yes
Purchased goods and services	No
Capital goods	No
Fuel- and energy-related activities not included in Scope 1 or Scope 2	No
Waste generated in operations	Yes

Does the institution's GHG emissions inventory include Scope 3 emissions from other categories?:

Yes

A brief description of the methodology and/or tool used to complete the GHG emissions inventory:

The Campus Carbon Calculator (v.6.85) by Clean Air Cool Planet (CACP) was the main tool for calculating greenhouse gas emissions. It was chosen because it is endorsed by the ACUPCC and is very easy to use. The Calculator is an Excel workbook designed to facilitate the following tasks: Conducting a Greenhouse Emissions Inventory, Projecting Emissions into the Future, and Evaluating a Portfolio of Carbon Reduction Projects (2). It allows the user to input data in readily available units (e.g. miles, kWh) and to determine related equivalent CO2 emissions so that all emissions can be viewed on an equivalent basis. The calculator has built-in macros and formulas that make the conversions and produce various graphs that illustrate changes and trends in emissions over time.

Further information can be found at

 $http://rs.acupcc.org/site_media/uploads/ghg/3254-2013-inventoryreports_1.pdf$

Has the GHG emissions inventory been validated internally by personnel who are independent of the GHG accounting and reporting process and/or verified by an independent, external third party?:

Yes

A brief description of the internal and/or external verification process:

This student work was reviewed by university professors and professional staff before submitting.

Scope 1 and Scope 2 GHG emissions::

	Performance Year	Baseline Year
Scope 1 GHG emissions from stationary combustion	31,416.30 Metric Tons of CO2 Equivalent	31,449 Metric Tons of CO2 Equivalent
Scope 1 GHG emissions from other sources	903.60 Metric Tons of CO2 Equivalent	1,108.30 Metric Tons of CO2 Equivalent
Scope 2 GHG emissions from purchased electricity	1,390.80 Metric Tons of CO2 Equivalent	2,131.40 Metric Tons of CO2 Equivalent
Scope 2 GHG emissions from other sources	0 Metric Tons of CO2 Equivalent	0 Metric Tons of CO2 Equivalent

Figures needed to determine total carbon offsets::

	Performance Year	Baseline Year
Institution-catalyzed carbon offsets generated	0 Metric Tons of CO2 Equivalent	0 Metric Tons of CO2 Equivalent
Carbon sequestration due to land that the institution manages specifically for sequestration	0 Metric Tons of CO2 Equivalent	0 Metric Tons of CO2 Equivalent
Carbon storage from on-site composting	0 Metric Tons of CO2 Equivalent	0 Metric Tons of CO2 Equivalent
Third-party verified carbon offsets purchased	1,721.70 Metric Tons of CO2 Equivalent	1,552 Metric Tons of CO2 Equivalent

A brief description of the institution-catalyzed carbon offsets program:

none

A brief description of the carbon sequestration program and reporting protocol used:

none

A brief description of the composting and carbon storage program:

none

A brief description of the purchased carbon offsets, including third party verifier(s) and contract timeframes:

renewable energy credits from wind power

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
Number of residential students	2,973	3,050
Number of residential employees	17	17
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	3,527.20	3,563
Full-time equivalent of employees	1,308.70	1,162
Full-time equivalent of distance education students	0	0

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2011	June 30, 2012
Baseline Year	July 1, 2007	June 30, 2008

A brief description of when and why the GHG emissions baseline was adopted:

The GHG emissions baseline of 2008 was adopted as part of Bucknell's Climate Action Plan (submitted to the ACUPCC in 2010). 2008 was the year in which the Bucknell signed the Presidents Climate Commitment, and was the most recent year for which a complete greenhouse gas inventory was available.

Gross floor area of building space, performance year:

2,683,474 *Square Feet*

Floor area of energy intensive building space, performance year:

	Floor Area
Laboratory space	390,408 Square Feet
Healthcare space	8,931 Square Feet
Other energy intensive space	31,863 Square Feet

Scope 3 GHG emissions, performance year::

	Emissions
Business travel	4,205 Metric Tons of CO2 Equivalent
Commuting	2,827 Metric Tons of CO2 Equivalent
Purchased goods and services	0 Metric Tons of CO2 Equivalent
Capital goods	0 Metric Tons of CO2 Equivalent
Fuel- and energy-related activities not included in Scope 1 or Scope 2	0 Metric Tons of CO2 Equivalent
Waste generated in operations	385.60 Metric Tons of CO2 Equivalent
Other categories (please specify below)	177.90 Metric Tons of CO2 Equivalent

A brief description of the sources included in Scope 3 GHG emissions from "other categories":

Greenhouse gas emissions from wastewater and paper were included for the first time in the 2012 GHG inventory.

A copy of the most recent GHG emissions inventory:

The website URL where the GHG emissions inventory is posted:

http://rs.acupcc.org/ghg/1811/

A brief description of the institution's GHG emissions reduction initiatives, including efforts made during the previous three years:

The University's climate action plan specifies that through the year 2015 greenhouse gas reduction initiatives will be focused on energy conservation projects. To that end the University created and filled an energy manager position in 2011. The energy manager has spearheaded many conservation projects in the past 3 years. The greenhouse gas reductions resulting from these initiatives should begin to be reflected in the next greenhouse gas inventory, due to ACUPCC 1/15/16.

Outdoor Air Quality

Responsible Party

Stephen Durfee

Energy Manager Facilities

Criteria

Part 1

Institution has adopted policies or guidelines to improve outdoor air quality and minimize air pollutant emissions from mobile sources. Policies and/or guidelines may include, but are not limited to, prohibiting vehicle idling, restrictions on the use of powered lawn care equipment, and other strategies for minimizing mobile emissions.

Policies adopted by entities of which the institution is part (e.g. government or university system) may count for Part 1 of this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution has completed an inventory of significant air emissions from stationary sources on campus. Significant emissions include nitrogen oxides (NO_x) , sulfur oxides (SO_x) , and other standard categories of air emissions identified in environmental permits held by the institution, international conventions, and/or national laws or regulations.

"---" indicates that no data was submitted for this field

Does the institution have policies and/or guidelines in place to improve outdoor air quality and minimize air pollutant emissions from mobile sources?:

No

A brief description of the policies and/or guidelines to improve outdoor air quality and minimize air pollutant emissions from mobile sources:

We don't have a policy or guideline per se (such as an idling limit). It isn't exactly policy, but we have gradually moved parking to the perimeter of campus to try discouraging students from driving to class. Also, we installed two electric vehicle charging stations in 2013 with more planned.

Has the institution completed an inventory of significant air emissions from stationary sources on campus?:

Yes

A brief description of the methodology(ies) the institution used to complete its air emissions inventory:

All emissions are based on fuel consumption multiplied by an EPA/DEP approved emissions factor. Emissions factors for large sources are generally determined by periodic emissions testing.

Weight of the following categories of air emissions from stationary sources::

	Weight of Emissions
Nitrogen oxides (NOx)	25.11 <i>Tons</i>
Sulfur oxides (SOx)	0.58 <i>Tons</i>
Carbon monoxide (CO)	2.22 Tons
Particulate matter (PM)	0.82 <i>Tons</i>
Ozone (O3)	0 Tons
Lead (Pb)	0 Tons
Hazardous air pollutants (HAPs)	0 Tons
Ozone-depleting compounds (ODCs)	0.03 <i>Tons</i>
Other standard categories of air emissions identified in permits and/or regulations	33,720.82 <i>Tons</i>

A brief description of the institution's initiatives to minimize air pollutant emissions from stationary sources, including efforts made during the previous three years:

Efforts to optimize central plant operations reduced emissions 3-4% from 2012 to 2013.

The website URL where information about the institution's outdoor air quality policies, guidelines or inventory is available:

Buildings

This subcategory seeks to recognize institutions that are taking steps to improve the sustainability performance of their buildings. Buildings are generally the largest user of energy and the largest source of greenhouse gas emissions on campuses. Buildings also use significant amounts of potable water. Institutions can design, build, and maintain buildings in ways that provide a safe and healthy indoor environment for inhabitants while simultaneously mitigating the building's impact on the outdoor environment.

Credit
Building Operations and Maintenance
Building Design and Construction
Indoor Air Quality

Building Operations and Maintenance

Responsible Party

Stephen Durfee

Energy Manager Facilities

Criteria

Institution owns and operates buildings that are:

1) Certified under a green building rating system for existing buildings, e.g. LEED® for Existing Buildings: Operations & Maintenance (O&M)

And/or

- 2) Operated and maintained in accordance with formally adopted sustainable operations and maintenance guidelines and policies that cover all of the following:
- Impacts on the surrounding site
- Energy consumption
- Building-level energy metering
- Usage of environmentally preferable materials
- Indoor environmental quality
- Water consumption
- · Building-level water metering

Building space that meets multiple criteria listed above should not be double-counted.

"---" indicates that no data was submitted for this field

Does the institution have any building space certified under the following green building rating systems for existing buildings?:

	Yes or No
LEED for Existing Buildings or another 4-tier rating system used by an Established Green Building Council (GBC)	No
The DGNB system, Green Star Performance, or another 3-tier GBC rating system	No

BREEAM-In Use, CASBEE for Existing Building, or another 5-tier GBC rating system	No
Other non-GBC rating systems (e.g. BOMA BESt, Green Globes)	No

A brief description of the green building rating system(s) used and/or a list or sample of certified buildings and ratings:

none

Total floor area of eligible building space (operations and maintenance):

1,702,191 Square Feet

Floor area of building space that is certified at each level under a 4-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 Square Feet
3rd Highest Level (e.g. LEED Silver)	0 Square Feet
2nd Highest Level (e.g. LEED Gold)	0 Square Feet
Highest Achievable Level (e.g. LEED Platinum)	0 Square Feet

Floor area of building space that is certified at each level under a 3-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	0 Square Feet
Mid-Level	0 Square Feet
Highest Achievable Level	0 Square Feet

Floor area of building space that is certified at each level under a 5-tier rating system for existing buildings used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	0 Square Feet
4th Highest Level	0 Square Feet
Mid-Level	0 Square Feet
2nd Highest Level	0 Square Feet
Highest Achievable Level	0 Square Feet

Floor area of building space that is certified at any level under other green building rating systems for existing buildings:

0 Square Feet

Floor area of building space that is maintained in accordance with formally adopted sustainable building operations and maintenance guidelines or policies, but NOT certified:

0 Square Feet

A copy of the sustainable building operations and maintenance guidelines or policies:

The date the guidelines or policies were formally adopted:

A brief description of the sustainable building operations and maintenance program and/or a list or sample of buildings covered:

Buildings are scheduled to an unoccupied set-point when there are no events.

A brief description of how the institution ensures compliance with sustainable building operation and maintenance guidelines and policies:

none

The website URL where information about the institution's certified buildings and/or sustainable operations and maintenance guidelines or policies is available:

Building Design and Construction

Responsible Party

Stephen Durfee

Energy Manager Facilities

Criteria

Institution-owned buildings that were constructed or underwent major renovations in the previous five years are:

- 1) Certified under a green building rating system for new construction and major renovations (e.g. the LEED® for New Construction and Major Renovations, LEED for Commercial Interiors, LEED for Healthcare, and/or LEED for Core and Shell Green Building Rating Systems)
- 2) Certified Living under the Living Building Challenge (LBC)

And/or

- 3) Designed and built in accordance with formally adopted green building guidelines and policies that cover all of the following topics:
- Impacts on the surrounding site
- Energy consumption
- Building-level energy metering
- Usage of environmentally preferable materials
- Indoor environmental quality
- Water consumption
- · Building-level water metering

Building space that meets multiple criteria listed above should not be double-counted.

"---" indicates that no data was submitted for this field

Does the institution have any building space certified under the following green building rating systems for new construction and major renovations?:

	Yes or No
LEED or another 4-tier rating system used by an Established Green Building Council (GBC)	Yes
The DGNB system, Green Star, or another 3-tier GBC rating system	No

BREEAM, CASBEE, or another 5-tier GBC rating system	No
The Living Building Challenge	No
Other non-GBC rating systems (e.g. BOMA BESt, Green Globes)	No

A brief description of the green building rating system(s) used and/or a list of certified buildings and ratings:

Lambda Chi Alpha Fraternity, Kappa Delta Rho Fraternity, Academic West

Total floor area of eligible building space (design and construction):

95,000 Square Feet

Floor area of building space that is certified at each level under a 4-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level (e.g. LEED Certified)	0 Square Feet
3rd Highest Level (e.g. LEED Silver)	95,000 Square Feet
2nd Highest Level (e.g. LEED Gold)	0 Square Feet
Highest Achievable Level (e.g. LEED Platinum)	0 Square Feet

Floor area of building space that is certified at each level under a 3-tier rating system for new construction and major renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	0 Square Feet
Mid-Level	0 Square Feet
Highest Achievable Level	0 Square Feet

Floor area of building space that is certified at each level under a 5-tier rating system for new construction and major

renovations used by an Established Green Building Council::

	Certified Floor Area
Minimum Level	0 Square Feet
4th Highest Level	0 Square Feet
Mid-Level	0 Square Feet
2nd Highest Level	0 Square Feet
Highest Achievable Level	0 Square Feet

Floor area of building space cer	rtified Living under tl	he Living Building	Challenge:
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0 Square Feet

Floor area of building space that is certified at any level under other green building rating systems for new construction and major renovations:

0 Square Feet

Floor area of building space that was designed and constructed in accordance with green building policies or guidelines but NOT certified:

0 Square Feet

A copy of the guidelines or policies:

The date the guidelines or policies were adopted:

A brief description of the green building guidelines or policies and/or a list or sample of buildings covered:

A brief description of how the institution ensures compliance with green building design and construction guidelines and policies:

The website URL where information about the institution's certified buildings and/or green building design and construction guidelines or policies is available:

http://www.bucknell.ed	lu/x74915.xml
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Responsible Party

Stephen Durfee

Energy Manager Facilities

Criteria

Institution has an indoor air quality (IAQ) management program that includes regular auditing or monitoring, a mechanism for occupants to register complaints, and action plans to implement any corrective measures required in response to audits, monitoring or complaints.

Policies and plans adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

"---" indicates that no data was submitted for this field

Floor area of building space covered by an indoor air quality (IAQ) management program that meets the criteria for this credit:

1,995,077 Square Feet

Gross floor area of building space:

2,754,135 Square Feet

A brief description of the institution's indoor air quality program(s):

Air quality monitoring for carbon monoxide, mold. Air handlers have specific air changes per time to meet code.

The website URL where information about the institution's indoor air quality program(s) is available:

Dining Services

This subcategory seeks to recognize institutions that are supporting a sustainable food system. Modern industrial food production often has deleterious environmental and social impacts. Pesticides and fertilizers used in agriculture can contaminate ground and surface water and soil, which can in turn have potentially dangerous impacts on wildlife and human health. The production of animal-derived foods often subjects animals to inhumane treatment and animal products have a higher per-calorie environmental intensity than plant-based foods. Additionally, farm workers are often directly exposed to dangerous pesticides, subjected to harsh working conditions, and paid substandard wages. Furthermore, food is often transported long distance to institutions, producing greenhouse gas emissions and other pollution, as well as undermining the resiliency of local communities.

Institutions can use their purchasing power to require transparency from their distributors and find out where the food comes from, how it was produced, and how far it traveled. Institutions can use their food purchases to support their local economies; encourage safe, environmentally-friendly and humane farming methods; and help eliminate unsafe working conditions and alleviate poverty for farmers. These actions help reduce environmental impacts, preserve regional farmland, improve local food security, and support fair and resilient food systems.

Please note that while dining services can also play an important role in conserving energy and water, reducing waste, and purchasing environmentally preferable materials other than food, STARS measures these impacts across the institution instead of by department; therefore, the benefits of these actions are captured in the Energy, Water, Waste, and Purchasing subcategories, respectively.

Credit	
Food and Beverage Purchasing	
Low Impact Dining	

Food and Beverage Purchasing

Responsible Party

John Cummins

Director, Bucknell Dining Bucknell Dining

Criteria

Part 1

Institution's dining services purchase food and beverages that meet at least one of the following criteria:

· Local and community-based

And/or

• Third party verified to be ecologically sound, fair and/or humane

Food and beverage purchases that meet both criteria listed above (e.g. local community-based products that are Certified Organic) should not be double-counted.

Local community- based products:

- Are sourced from local community-based producers (directly or through distributors)
- Contain raw ingredients (excluding water) that are third party verified and/or locally harvested and produced (e.g. bread made with Organic flour or local honey) and
- Exclude products from Concentrated Animal Feeding Operations (CAFOs), products that have minimal nutritional value (e.g. soda, chewing gum, candies made predominantly from sweeteners), and products from producers that have been convicted of one or more labor law violations within the previous three years

Products that are not local and community-based must be third party verified to count. Recognized third party standards and certifications for food and beverages are outlined in the STARS Technical Manual. Institutions located outside the U.S. and Canada may use additional third party certifications to identify ecologically sound, fair and humane products, provided the certifications are reported in "Notes about this submission".

Part 1 of this credit includes food and beverage purchases for on-campus dining operations and catering services operated by the institution or the institution's primary dining services contractor (e.g. Aramark, Bon Appétit Management Company, Chartwells, Sodexo). On-site franchises, convenience stores, vending services, and concessions are excluded from Part 1.

Part 2

Institution's on-site franchises, convenience stores, vending services, and/or concessions purchase food and beverages that are third party verified and/or locally sourced (i.e. meet the criteria outlined in Part 1).

Percentage of dining services food and beverage expenditures that are local and community-based and/or third party verified:
15
A copy of an inventory, list or sample of sustainable food and beverage purchases:
Bucknell local purchases 2013.pdf
An inventory, list or sample of sustainable food and beverage purchases:
Does the institution wish to pursue Part 2 of this credit (food and beverage expenditures for on-site franchises, convenience stores, vending services, or concessions)?: Yes
165
Percentage of on-site franchise, convenience store, vending services, and concessions food and beverage purchases that are local and community-based and/or third party verified: 13
A copy of an inventory, list or sample of on-site franchise, convenience store, vending machine, and/or concessions food and beverage purchases that are sustainably produced:
Bucknell local purchases 2013.xlsx - Google Sheets.webarchive
An inventory, list or sample of on-site franchise, convenience store, vending machine, and/or concessions food and beverage purchases that are sustainably produced:
A brief description of the sustainable food and beverage purchasing program:
We pledge to our guests and clients to buy as much locally produced product as possible. We consider 150 miles as local. This includes produce, dairy, and bread as well as locally produced and or supplied paper and ingredients.
A brief description of the methodology used to track/inventory sustainable food and beverage purchases:
Our purchasing Dept. located at our Home Office in Pittsburg, tracks and created the attached document.
Total annual food and beverage expenditures:

Which of the following food service providers are present on campus and included in the total food and beverage

4,230,185.01 US/Canadian \$

expenditure figures?:

	Present?	Included?
Dining operations and catering services operated by the institution	No	No
Dining operations and catering services operated by a contractor	Yes	Yes
Franchises	No	No
Convenience stores	Yes	Yes
Vending services	Yes	No
Concessions	Yes	Yes

Has the institution achieved the following?:

	Yes or No
Fair Trade Campus, College or University status	Yes
Certification under the Green Seal Standard for Restaurants and Food Services (GS-46)	No
Marine Stewardship Council (MSC) certification	Yes
Signatory of the Real Food Campus Commitment (U.S.)	No

A brief description of other sustainable restaurant and food service standards that the institution's dining services operations are certified under:

The website URL where information about the institution's sustainable food and beverage purchasing efforts is available:

http://www.bucknell.edu/x44946.xml

Low Impact Dining

Responsible Party

John Cummins

Director, Bucknell Dining Bucknell Dining

Criteria

Part 1

Conventionally produced animal products comprise less than 30 percent of the institution's total dining services food purchases.

Conventionally produced animal products include all food products that contain animal derived (i.e. meat, fish, egg, dairy) ingredients that have not been verified to be sustainably produced. Sustainably produced animal products have been either:

• Third party verified to be ecologically sound and/or humane (see OP 6: Food and Beverage Purchasing)

Or

• Verified by the institution to be both ecologically sound and humane (e.g. "Pasture Raised", "Grass Fed" or "Humanely Raised") through a relationship with a local producer

Part 2

Institution:

Offers diverse, complete-protein vegan options at all meals in at least one dining facility on campus

And

· Provides labels and/or signage that distinguishes between vegan, vegetarian (not vegan), and other items

This credit includes on-campus dining operations and catering services operated by the institution or the institution's primary dining services contractor. On-site franchises, convenience stores, vending machines, and concessions should be excluded to the extent feasible.

"---" indicates that no data was submitted for this field

Percentage of total dining services food purchases comprised of conventionally produced animal products:

29

A brief description of the methodology used to track/inventory expenditures on animal products:

Director of Dining Services calculated these figures based on inventory records.

Does the institution offer diverse, complete-protein vegan dining options at all meals in at least one dining facility on campus?:
Yes
Does the institution provide labels and/or signage that distinguishes between vegan, vegetarian (not vegan), and other items?:
Yes
Are the vegan options accessible to all members of the campus community?:
Yes
A brief description of the vegan dining program, including availability, sample menus, signage and any promotional activities (e.g. "Meatless Mondays"):
Vegetarian options are provided for every meal during the regular semester dining program. Our Resident Dining Facility, the Bostwick Marketplace, features a station called Whole Body. It offers a hot Vegan and Vegetarian Entrée at Lunch and Dinner Daily. Additionally 4 cold inherently vegan salads are offered beside it. Theses include hummus, tubule and Mediterranean offerings rating daily.
A brief description of other efforts the institution has made to reduce the impact of its animal-derived food purchases:
Our Mongolian BBQ area, Mongo Fresh, offers Seitan, Tofu, Tempeh and Quinoa as protein substitutes. We offer these as meatless options for our guests throughout the facility as well.
The website URL where information about where information about the vegan dining program is available:
http://www.BucknellDining.edu/
Annual dining services expenditures on food:
4,230,185.01 US/Canadian \$
Annual dining services expenditures on conventionally produced animal products:
1,226,753 US/Canadian \$

390,493.23 US/Canadian \$

Annual dining services expenditures on sustainably produced animal products:

Energy

This subcategory seeks to recognize institutions that are reducing their energy consumption through conservation and efficiency, and switching to cleaner and renewable sources of energy such as solar, wind, geothermal, and low-impact hydropower. For most institutions, energy consumption is the largest source of greenhouse gas emissions, which cause global climate change. Global climate change is having myriad negative impacts throughout the world, including increased frequency and potency of extreme weather events, sea level rise, species extinction, water shortages, declining agricultural production, ocean acidification, and spread of diseases. The impacts are particularly pronounced for vulnerable and poor communities and countries. In addition to causing global climate change, energy generation from fossil fuels, especially coal, produces air pollutants such as sulfur dioxide, nitrogen oxides, mercury, dioxins, arsenic, cadmium and lead. These pollutants contribute to acid rain as well as health problems such as heart and respiratory diseases and cancer. Coal mining and oil and gas drilling can also damage environmentally and/or culturally significant ecosystems. Nuclear power creates highly toxic and long-lasting radioactive waste. Large-scale hydropower projects flood habitats and disrupt fish migration and can involve the relocation of entire communities.

Implementing conservation measures and switching to renewable sources of energy can help institutions save money and protect them from utility rate volatility. Renewable energy may be generated locally and allow campuses to support local economic development. Furthermore, institutions can help shape markets by creating demand for cleaner, renewable sources of energy.

Credit
Building Energy Consumption
Clean and Renewable Energy

Building Energy Consumption

Responsible Party

Stephen Durfee

Energy Manager Facilities

Criteria

Part 1

Institution has reduced its total building energy consumption per gross square foot/metre of floor area compared to a baseline.

Part 2

Institution's annual building energy consumption is less than the minimum performance threshold of 28 Btu per gross square foot (2.6 Btu per gross square metre) of floor area per degree day.

Performance for Part 2 of this credit is assessed using EUI-adjusted floor area, a figure that accounts for significant differences in energy use intensity (EUI) between types of building space.

"---" indicates that no data was submitted for this field

Total building energy consumption, all sources (transportation fuels excluded):

	Performance Year	Baseline Year
Total building energy consumption	607,663 <i>MMBtu</i>	599,136 <i>MMBtu</i>

Purchased electricity and steam:

	Performance Year	Baseline Year
Grid-purchased electricity	7,867 <i>MMBtu</i>	18,977 <i>MMBtu</i>
District steam/hot water	0 MMBtu	0 MMBtu

Gross floor area of building space::

	Performance Year	Baseline Year	

Floor area of energy intensive space, performance year::

	Floor Area
Laboratory space	390,408 Square Feet
Healthcare space	8,931 Square Feet
Other energy intensive space	

Degree days, performance year (base 65 $^{\circ}F$ / 18 $^{\circ}C$)::

	Degree Days
Heating degree days	5,831
Cooling degree days	1,016

Source-site ratios::

	Source-Site Ratio (1.0 - 5.0; see help icon above)
Grid-purchased electricity	3.14
District steam/hot water	1.20

Start and end dates of the performance year and baseline year (or 3-year periods)::

	Start Date	End Date
Performance Year	July 1, 2012	June 30, 2013
Baseline Year	July 1, 2007	June 30, 2008

A brief description of when and why the building energy consumption baseline was adopted:

The baseline year corresponds to the baseline year of the University's climate action plan.

A brief description of any building temperature standards employed by the institution:

The standard discharge air temperature is 55 degrees Fahrenheit. The occupied cooling set-point is 74 degrees Fahrenheit and the occupied heating set-point is 68 degrees Fahrenheit.

A brief description of any light emitting diode (LED) lighting employed by the institution:

Noribachi LED lights in fieldhouse, LED lights in performing arts building

A brief description of any occupancy and/or vacancy sensors employed by the institution:

Occupancy sensors are

used to control lighting in meeting rooms, offices, and restrooms in all new and renovated buildings.

A brief description of any passive solar heating employed by the institution:

passive solar heating that provides hot water needs for small residential unit

A brief description of any ground-source heat pumps employed by the institution:

none

A brief description of any cogeneration technologies employed by the institution:

Bucknell operates a highly efficient natural gas co-gen plant that was installed in 1998. The plant reduced greenhouse gas emissions by 40%.

A brief description of any building recommissioning or retrofit program employed by the institution:

The lights in the fieldhouse were retrofitted with LED lights as well as the lights in the performing arts building. The kitchen hoods in the dining areas were retrofitted with a system that allows the fan speed to adjust accordingly to usage. Additionally, the HVAC system in a science building was replaced and heating pumps in the gymnasium were converted to VFDs instead of constant speed drives. Another building was added to the buildings on campus that are automatically controlled so that it can be scheduled when occupied.

A brief description of any energy metering and management systems employed by the institution:

WebCTRL, a program distributed by Automated Logic Corporation, shows the electric, chilled water and steam meters for buildings around campus. These are monitored monthly. Additionally, the buildings are scheduled to unoccupied mode when there are no events so that the room temperature is allowed to setback. This allows the equipment to slow down or stop running for a period of time.

A brief description of the institution's program to replace energy-consuming appliances, equipment and systems with

high efficiency alternatives:
none
A brief description of any energy-efficient landscape design initiatives employed by the institution:
The engineering building as well as the new LEED certified building have green roofs.
A brief description of any vending machine sensors, lightless machines, or LED-lit machines employed by the institution:
VendingMizer occupancy sensors
A brief description of other energy conservation and efficiency initiatives employed by the institution:
Analytika is a program that evaluates the data from the automated controls system and lists the problems each building is experiencing. This helps formulate work orders so that machinery does not continue to operate inefficiently.
The website URL where information about the institution's energy conservation and efficiency initiatives is available:

Clean and Renewable Energy

Responsible Party

Stephen Durfee

Energy Manager Facilities

Criteria

Institution supports the development and use of clean and renewable energy sources, using any one or combination of the following options.

Option 1:

Option 2:

Option 3:

Option 4:

Generating electricity from clean and renewable energy sources on campus and retaining or retiring the rights to the environmental attributes of such electricity. (In other words, if the institution has sold Renewable Energy Credits for the clean and renewable energy it generated, it may not claim such energy here.) The on-site renewable energy generating devices may be owned and/or maintained by another party as long as the institution has contractual rights to the associated environmental attributes.

Using renewable sources for non-electric, on-site energy generation, such as biomass for heating.

Catalyzing the development of off-site clean and renewable energy sources (e.g. an off-campus wind farm that was designed and built to supply electricity to the institution) and retaining the environmental attributes of that energy.

Purchasing the environmental attributes of electricity in the form of Renewable Energy Certificates (RECs) or other similar renewable energy products that are either Green-e Energy certified or meet Green-e Energy's technical requirements and are verified as such by a third party, or purchasing renewable electricity through the institution's electric utility through a certified green power purchasing option.

Since this credit is intended to recognize institutions that are actively supporting the development and use of clean and renewable energy, neither the electric grid mix for the region in which the institution is located nor the grid mix reported by the electric utility that serves the institution count for this credit.

The following renewable systems are eligible for this credit:

- Concentrated solar thermal
- Geothermal systems that generate electricity
- Low-impact hydroelectric power
- Solar photovoltaic
- Wave and tidal power

Wind

Biofuels from the following sources are eligible:

- Agricultural crops
- · Agricultural waste
- · Animal waste
- · Landfill gas
- · Untreated wood waste
- · Other organic waste

Technologies that reduce the amount of energy used but do not generate renewable energy do not count for this credit. For example, daylighting, passive solar design, and ground-source heat pumps are not counted in this credit. The benefits of such strategies, as well as improved efficiencies achieved through using cogeneration technologies, are captured by *OP 1: Greenhouse Gas Emissions* and *OP 8: Building Energy Consumption*.

Transportation fuels, which are covered by OP 1: Greenhouse Gas Emissions and OP 18: Campus Fleet, are not included in this credit.

"---" indicates that no data was submitted for this field

Clean and renewable energy from the following sources::

	Performance Year
Option 1: Clean and renewable electricity generated on-site during the performance year and for which the institution retains or has retired the associated environmental attributes	20.43 <i>MMBtu</i>
Option 2: Non-electric renewable energy generated on-site	0 MMBtu
Option 3: Clean and renewable electricity generated by off-site projects that the institution catalyzed and for which the institution retains or has retired the associated environmental attributes	0 MMBtu
Option 4: Purchased third-party certified RECs and similar renewable energy products (including renewable electricity purchased through a certified green power purchasing option)	13,638 <i>MMBtu</i>

Total energy consumption, performance year:

537,020 MMBtu

A brief description of on-site renewable electricity generating devices :
Three photovoltaic arrays with a total generating capacity of 5.6 kW. One is ground mounted, one is pole mounted and the third tracks the sun.
A brief description of on-site renewable non-electric energy devices:
none
A brief description of off-site, institution-catalyzed, renewable electricity generating devices:
none

The website URL where information about the institution's renewable energy sources is available:

A brief description of the RECs and/or similar renewable energy products:

Bucknell purchases 4,000,000 kWh per year in wind energy RECs.

http://www.bucknell.edu/x20303.xml

Grounds

This subcategory seeks to recognize institutions that plan and maintain their grounds with sustainability in mind. Beautiful and welcoming campus grounds can be planned, planted, and maintained in any region while minimizing the use of toxic chemicals, protecting wildlife habitat, and conserving water and resources.

Credit	
Landscape Management	
Biodiversity	

Landscape Management

Responsible Party

John Testa

Grounds and Labor Supervisor Facilities

Criteria

Institution's grounds include areas that are managed at one or more of the following levels:

- 1) Managed in accordance with an Integrated Pest Management (IPM) Plan
- 2) Managed in accordance with a sustainable landscape management program

And/or

3) Organic, certified and/or protected

The level at which an area of grounds is managed may be determined as outlined in the table below:

Management Level	Standards and/or Certifications Required
1) IPM Plan	 IPM plan calls for: Using least-toxic chemical pesticides, Minimum use of chemicals, and Use of chemicals only in targeted locations and only for targeted species

2) Sustainable Landscape Management Program	The program includes formally adopted guidelines, policies and/or practices that cover all of the following: • Integrated pest management (see above) • Plant stewardship - protecting and using existing vegetation (e.g. through the use of a tree care plan), using native and ecologically appropriate plants, and controlling and managing invasive species • Soil stewardship - organic soils management practices that restore and/or maintain a natural nutrient cycle and limit the use of inorganic fertilizers and chemicals • Use of environmentally preferable materials - utilizing reused, recycled and local and sustainably produced landscape materials • Hydrology and water use - restoring and/or maintaining the integrity of the natural hydrology by promoting water infiltration, minimizing or eliminating the use of potable water for irrigation, and protecting/restoring riparian, wetland, and shoreline habitats and lost streams • Materials management and waste minimization - composting and/or mulching waste from groundskeeping, including grass trimmings • Snow and ice management (if applicable) - implementing technologies or strategies to reduce the environmental impacts
3) Organic, Certified and/or Protected	Protected areas and land that is: • Maintained in accordance with an organic land care standard or sustainable landscape management program that has eliminated the use of inorganic fertilizers and chemical pesticides, fungicides and herbicides in favor of ecologically preferable materials • Certified Organic • Certified under the Forest Stewardship Council (FSC) Forest Management standard • Certified under the Sustainable Sites Initiative TM (SITES TM) and/or • Managed specifically for carbon sequestration (as documented in policies, land management plans or the equivalent)

Land that meets multiple criteria should not be double-counted. An area of grounds that does not meet the standards specified for a particular management level should be reported at the next appropriate level for which it does meet the standards. For example, a landscape management program that includes an IPM plan and meets some, but not all, of the other standards listed for a sustainable landscape management plan should be reported at level 1 (IPM Plan).

Figures required to calculate the total area of managed grounds::

	Area
Total campus area	446 Acres
Footprint of the institution's buildings	23 Acres
Area of undeveloped land, excluding any protected areas	67 Acres

Area of managed grounds that is::

	Area
Managed in accordance with an Integrated Pest Management (IPM) Plan	0 Acres
Managed in accordance with a sustainable landscape management program that includes an IPM plan and otherwise meets the criteria outlined	350 Acres
Managed organically, third party certified and/or protected	0 Acres

A copy of the IPM plan:

The IPM plan:

We practice IPM on approximately 350 acres of our campus. The first step in our IPM program is to use appropriate measures to discourage the development of unwanted pest populations. Secondly, we routinely monitor our turf, trees and shrubs for any potential threats. Thirdly, we evaluate the need for any intervention with a pesticide product. Because of the continued bee research on campus we only use pesticides when it is absolutely necessary. If pesticides are required to control a pest population we will use the least toxic product at the lowest recommended rate. Our goal is to reduce or minimize risks to humans and the environment.

A brief summary of the institution's approach to sustainable landscape management:

Our sustainable landscape goal is to provide a functional, aesthetically pleasing, cost-efficient, environmentally friendly campus. We try to balance our intense management of athletic fields and centrally located high visibility areas with limited or zero intervention in the remaining areas. All of our landscape decisions include discussions of the environmental impact and "doing the right thing". Our current sustainability program includes, but is not limited to: composting yard waste, mulching mowers, IPM, irrigation efficiency, appropriate plant selections, mulch production, preservation of historic trees, green roofs, rain gardens and bioswales. In addition to our departmental

sustainability goals we receive valuable input concerning landscape sustainability from faculty, staff and students.

A brief description of how the institution protects and uses existing vegetation, uses native and ecologically appropriate plants, and controls and manages invasive species:

We recently developed a comprehensive, campus wide, tree management plan that will be implemented by our certified arborist. New construction includes the LEED landscape requirements for certification points. Several areas of the campus, under the direction of the Biology Department, are being naturalized. Those areas include the steep slopes in the Grove and the Miller run stream banks

A brief description of the institution's landscape materials management and waste minimization policies and practices:

Currently, we collect, tub grind and compost our tree trimmings and brush into usable mulch. Also, we compost our leaves and yard waste which is used as a soil amendment for planting.

A brief description of the institution's organic soils management practices:

We use a natural fall fertilizer (NatureSafe) of our athletic fields and high visibility turf areas. We practice grass cycling on all our turf areas. All of our inorganic fertilizers are slow release and no or low phosphorus which reduces nutrient runoff.

A brief description of the institution's use of environmentally preferable materials in landscaping and grounds management:

We use a natural fall fertilizer (NatureSafe) of our athletic fields and high visibility turf areas. We practice grass cycling on all our turf areas. All of our inorganic fertilizers are slow release and no or low phosphorus which reduces nutrient runoff.

A brief description of how the institution restores and/or maintains the integrity of the natural hydrology of the campus:

Our current construction and campus expansion (approx 50 acres) includes several acres of rain gardens, bioswales and green roofs. The majority of campus is not irrigated. We collect rainwater for hand watering of trees, shrubs, perennials and annual flowers. The six athletic fields that have irrigation are monitored daily and irrigation is on an as needed basis

A brief description of how the institution reduces the environmental impacts of snow and ice removal (if applicable):

We use power brooms to remove snow and ice on all of our paths. The brooms remove most of the frozen material which reduces the need for ice melting products.

A brief description of any certified and/or protected areas:

The Bucknell University Environmental Center grounds are managed organically and are protected but not certified.

Is the institution recognized by the Arbor Day Foundation's Tree Campus USA program (if applicable)?: No			
The website URL where information about the institution's sustainable landscape management programs and practices is available:			

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

The institution conducts one or both of the following:

An assessment to identify endangered and vulnerable species (including migratory species) with habitats on institution-owned or
-managed land

And/or

· An assessment to identify environmentally sensitive areas on institution-owned or -managed land

The institution has plans or programs in place to protect or positively affect the species, habitats and/or environmentally sensitive areas identified.

Assessments conducted and programs adopted by other entities (e.g. government, university system, NGO) may count for this credit as long as the assessments and programs apply to and are followed by the institution.

Submission Note:

Additional information on the Bucknell Arboretum is available at http://www.students.bucknell.edu/projects/arboretum/PublicWebsite/

"---" indicates that no data was submitted for this field

Does the institution own or manage land that includes or is adjacent to legally protected areas, internationally recognized areas, priority sites for biodiversity, and/or regions of conservation importance?:

Yes

A brief description of any legally protected areas, internationally recognized areas, priority sites for biodiversity, and/or regions of conservation importance on institution owned or managed land:

There is nothing in the campus master plan that formally designates an area as preserved, though lawn below the main quad and the grove are understood to be "sacred space". The plan does recognize the importance of open space and the overall rural character of the campus to Bucknell's character and states an intention to remain true to the Larson vision, with its emphasis on open space. However, there is an area specifically designated for preservation known as the Chillisquaque Natural Area and a property in Cowan.

Has the institution conducted an assessment or assessments to identify endangered and vulnerable species with habitats on institution-owned or –managed land?:

No

Has the institution conducted an assessment or assessments to identify environmentally sensitive areas on institution-owned or –managed land?:

Yes

The methodology(-ies) used to identify endangered and vulnerable species and/or environmentally sensitive areas and any ongoing assessment and monitoring mechanisms:

Currently, there is no systematic attention to native vs. exotic species. The greening literature places a great deal of emphasis on native species; however there are good reasons to include some exotic species in campus plantings. We discuss this issue in the "Biodiversity" section below. Similarly there is no systematic effort to identify, replace, or eradicate invasive exotic species on campus, though there have been efforts directed at removing multiflora rose. 137 (Rosa multiflora) from the Bucknell Natural Area as well as the occasional removal of Canada thistle (Cirsium arvense) where they have become problematic.

However, environmentally sensitive areas have been identified in the arboretum research that has been conducted since 2009, and also in the miller run restoration project that has been in progress since 2010.

A brief description of identified species, habitats and/or environmentally sensitive areas:

small mammals (e.g. groundhogs, skunk, opossum, and chipmunks) are commonly on campus and the golf course, particularly at night and in the early morning, as are deer. Birds and bats are also abundant, suggesting that insect prey populations are healthy, and sightings of predators such as foxes and hawks indicate that they function as habitat for wildlife. All the mature trees have been identified and catalogued through the arboretum project. Research has been conducted on the biodiversity of the Miller Run, a small stream running through campus, by faculty and students.

A brief description of plans or programs in place to protect or positively affect identified species, habitats and/or environmentally sensitive areas:

The 2009 environmental assessment recommended the following:

Protect open space and use the farm development to expand the amount of natural area.

Restore Miller Run

Establish a Bucknell Arboretum

Improve conditions for wildlife

Support the locals and create small natural areas

Begin the process of increasing tree species diversity

The Miller Run Environmental Restoration Project has also identified several acres of stream headwaters for restoration to be completed by 2015. Wild life conditions will be improved, and new species of plants will be established.

The website URL where information about the institution's biodiversity policies and programs(s) is available:

Purchasing

This subcategory seeks to recognize institutions that are using their purchasing power to help build a sustainable economy. Collectively, colleges and universities spend many billions of dollars on goods and services annually. Each purchasing decision represents an opportunity for institutions to choose environmentally and socially preferable products and services and support companies with strong commitments to sustainability.

Credit
Electronics Purchasing
Cleaning Products Purchasing
Office Paper Purchasing
Inclusive and Local Purchasing
Life Cycle Cost Analysis
Guidelines for Business Partners

Electronics Purchasing

Responsible Party

Donald Krech

Director of Procurement Procurement Services

Criteria

Part 1

Institution has an institution-wide stated preference to purchase computers and/or other electronic products that are EPEAT registered or meet similar multi-criteria sustainability standards for electronic products. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution purchases EPEAT registered products for desktop and notebook/laptop computers, displays, thin clients, televisions and imaging equipment.

This credit does not include servers, mobile devices such as tablets and smartphones, or specialized equipment for which no EPEAT certified products are available.

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated preference to purchase computers and/or other electronic products that are EPEAT registered or meet similar multi-criteria sustainability standards for electronic products?:

No

A copy of the electronics purchasing policy, directive, or guidelines:

The electronics purchasing policy, directive, or guidelines:

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

Does the institution wish to pursue to pursue Part 2 of this credit (expenditures on EPEAT registered electronics)?: No

Expenditures on EPEAT registered desktop and laptop computers, displays, thin clients, televisions, and imaging equipment::

	Expenditure Per Level
EPEAT Bronze	
EPEAT Silver	
EPEAT Gold	

Total expenditures on desktop	and laptop computers	s, displays, thin clic	ents, televisions, and	d imaging equipment:

The website URL where information about the institution's electronics purchasing policy, directive, or guidelines is available:

Cleaning Products Purchasing

Responsible Party

Merritt Pedrick

Associate Director for Operations Facilities

Criteria

Part 1

Institution has an institution-wide stated preference to purchase cleaning and janitorial products that are Green SealTM or UL Environment (EcoLogo)TM certified and/or meet similar multi-criteria sustainability standards for cleaning and janitorial products. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution's main cleaning or housekeeping department(s) and/or contractor(s) purchase Green Seal or UL Environment (EcoLogo) certified cleaning and janitorial products.

Cleaning and janitorial products include, at minimum:

- Cleaning/degreasing agents
- · General-purpose, bathroom, glass, and carpet cleaners
- Biologically-active cleaning products (enzymatic and microbial products)
- Floor-care products, e.g. floor finish and floor finish strippers
- · Hand cleaners
- · Sanitary paper products, e.g. toilet tissue, facial tissue, paper towels, napkins, and placemats
- Plastic film products (e.g. garbage bags/liners)
- · Laundry care products including powder, liquid or pre-measured dosage laundry detergents, stain removers and dryer sheets
- Specialty surface cleaning products and odor removers, including but not limited to: boat cleaning products; deck and outdoor
 furniture cleaning products; graffiti removers; metal cleaning products; motor vehicle (automotive/tire/wheel) cleaning products;
 motor vehicle windshield washing fluid; optical lens cleaning products; oven cleaning products; upholstery cleaning products; and
 other cleaning products sold for specific specialty uses

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated preference to purchase third party certified cleaning and janitorial products?:

Yes

A copy of the green cleaning product purchasing policy, directive, or guidelines:

The green cleaning product purchasing policy, directive, or guidelines:

All custodian purchases are purchased through the facilities department as custodian services are accomplished by in-house staff. The facilities department has been proactively investigating green cleaning options and systematically initiating the most economic, eco-friendly, and effective cleaning materials for over ten years. Facilities searches for innovative and more environmentally friendly products/procedures, such as greener cleaning chemicals; janitorial power equipment that reduces or eliminates use of chemicals; strategies to eliminate more hazardous cleaning procedures such as floor stripping; expanded use of color coded mico-fiber products; use of higher quality paper products that reduce consumption and /or reduce packaging.

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

Implemented Ready to Dispense(RTD) automated dilution systems in all custodian areas.

- * Reduces chemical use by 50% or more.
- * Super concentrates minimize storage, weight, and transportation.
- * Reduces storage requirement by standardizing products across campus.

Eliminated most aerosol spray products

Switched to Green seal products such as: Stride Citrus, Heavy duty pre-spray, Alpha-HP.

Use water rinse every other carpet cleaning to reduce cleaning chemical use and extend carpet life.

Using a degreaser instead of harsh acid based shower cleaners

Vacuums are all equipped with HEPA-like filtration.

Changed gel hand soaps with foam soaps in restrooms to reduce amount of soap waste.

Switching over to equipment scrub pads and water that eliminate the need for harsh floor strippers.

Using shampooers and scrubbers that use electrolyzed water which would also eliminate cleaning chemicals.

All new vacuums have HEPA filter systems.

Hands free dipenser for paper towel dispensers and a green seal paper towel product

Switched to grenn seal certified toilet tissue.

Does the institution wish to pursue Part 2 of this credit (expenditures on cleaning and janitorial products)?:

Yes

Expenditures on Green Seal and/or UL Environment (EcoLogo) certified cleaning and janitorial products:

224,730 US/Canadian \$

Total expenditures on cleaning and janitorial products:

435.565 US/Canadian \$

Has the institution's main cleaning or housekeeping department(s) and/or contractor(s) adopted a Green Seal or ISSA certified low-impact, ecological ("green") cleaning program?:

A brief description of the institution's low-impact, ecological cleaning program:	

A copy of the sections of the cleaning contract(s) that reference certified green products:

The sections of the cleaning contract(s) that reference certified green products:

All custodian cleaning is accomplished by in-house personnel. No contracts available.

The website URL where information about the institution's green cleaning initiatives is available:

http://www.bucknell.edu/x4772.xml

Office Paper Purchasing

Responsible Party

Donald Krech

Director of Procurement Procurement Services

Criteria

Part 1

Institution has an institution-wide stated preference to purchase office paper that has recycled content, is certified by the Forest Stewardship Council (FSC), and/or is certified to meet similar multi-criteria sustainability standards for paper. This can take the form of purchasing policies, guidelines, or directives.

Policies and directives adopted by entities of which the institution is part (e.g. government or the university system) may count for this credit as long as the policies apply to and are followed by the institution.

Part 2

Institution purchases office paper with post-consumer recycled, agricultural residue, and/or FSC certified content.

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated preference to purchase office paper that has recycled content and/or is certified to meet multi-criteria sustainability standards for paper?:

Yes

A copy of the paper purchasing policy, directive or guidelines:

The paper purchasing policy, directive or guidelines:

Procurement Services' Green Purchasing Policy

In a conscious effort to recognize its role, responsibility and commitment to the community regarding environmental stewardship, Bucknell University's Procurement Services department will give preference to purchasing goods that are:

- Durable, as opposed to single use or disposable
- Non-toxic, minimally toxic or biodegradable
- Recyclable
- Manufactured locally (minimally within the state of PA)
- Manufactured with minimal waste
- Free of heavy metals

- Eligible to earn LEED credits
- FSC certified
- Chlorine free
- Energy Star, Green Guard, Green Seal, or Green-e certified
- Low VOC content
- Made from rapidly renewable materials
- Delivered with reduced packaging

These goods shall be selected whenever reasonably practical: the practical goods are readily available; the preferable goods can perform their intended function generally as well as a non-preferable one; and the cost of the preferable goods are either approximately similar to that of non-preferable goods or their higher initial cost can be justified on the basis of long-term benefits.

Rev 4/11

A brief description of steps the institution has taken to ensure that the purchasing policy, directives, or guidelines are followed:

The purchase orders for copy paper are centralized thru Procurement. The individual departmental orders flow thru an electronic order system monitored by Procurement.

Does the institution wish to pursue Part 2 of this credit (expenditures on office paper)?:

Yes

Expenditures on office paper with the following levels of post-consumer recycled, agricultural residue, and/or FSC certified content::

	Expenditure Per Level
10-29 percent	0 US/Canadian \$
30-49 percent	0 US/Canadian \$
50-69 percent	0 US/Canadian \$
70-89 percent (or FSC Mix label)	175,000 US/Canadian \$
90-100 percent (or FSC Recycled label)	0 US/Canadian \$

Total expenditures on office paper:

180.000 US/Canadian \$

The website URL where information about the paper purchasing policy, directive, or guidelines is available:

Inclusive and Local Purchasing

Responsible Party

Donald Krech

Director of Procurement Procurement Services

Criteria

Part 1

Institution has an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses.

Support could take the form of giving preference during RFP processes, conducting targeted outreach to these businesses about opportunities to work with the institution, and/or other efforts to increase purchases made from such businesses.

Part 2

Institution makes purchases from companies that include disadvantaged businesses, social enterprises and/or local community-based businesses.

Purchases that meet multiple criteria listed above should not be double counted. Food and beverage purchases, which are covered by *OP* 6: Food and Beverage Purchasing and *OP* 7: Low Impact Dining, are not included in this credit.

"---" indicates that no data was submitted for this field

Does the institution have an institution-wide stated intent to support disadvantaged businesses, social enterprises, and/or local community-based businesses?:

No

A copy of the policy, guidelines or directive governing inclusive and local purchasing:

The policy, guidelines or directive governing inclusive and local purchasing:

Does the institution wish to pursue Part 2 of this credit (inclusive and local expenditures)?:

No

The percentage of total purchases from disadvantaged businesses, social enterprises and/or local community-based businesses:

The website URL where information about the institution's inclusive and local purchasing policies and/or program is available:

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Responsible Party

Dennis Hawley

Associate VP for Facilities Facilities

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		aria

Institution employs Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy- and water-using products and systems. Practices may include structuring RFPs so that vendors compete on the basis of lowest total cost of ownership (TCO) in addition to (or instead of) purchase price.

"---" indicates that no data was submitted for this field

Does the the institution employ Life Cycle Cost Analysis (LCCA) as a matter of policy and practice when evaluating energy and water-using products and systems?:

No

Does the institution employ LCCA as a matter of policy and practice across the operations of the entire institution (i.e. all divisions)?:

A brief description of the LCCA policy(ies) and practice(s):

The website URL where information about the institution's LCCA policies and practices is available:

Guidelines for Business Partners

Responsible Party

Donald Krech

Director of Procurement Procurement Services

Criteria

Institution has and acts on policies, guidelines and/or agreements that set expectations about the social and environmental responsibility of its business partners. The policies, guidelines and/or agreements require new and/or existing vendors and contractors and/or franchisees to adhere to:

1) Minimum environmental standards and practices defined by the institution, for example as outlined by the institution's sustainability policies

And/or

2) Minimum standards and practices governing employee wages, benefits, working conditions and rights that are consistent with fundamental International Labor Organization (ILO) conventions.

All enterprises with employees on-site as part of regular campus operations (e.g. contractors and franchisees) and other standing and/or formal business relationships (e.g. regular vendors and contracted services) are included.

Businesses that produce and/or sell licensed articles bearing the institution's trademarked logo ("licensees") are not included. They are covered in *EN 15: Trademark Licensing*.

The credit acknowledges institutional engagement in selecting its business partners and guiding them toward sustainability. Policies, guidelines or practices of the businesses themselves do not count for this credit in the absence of institutional selection criteria and/or guidance. Requiring compliance with existing legislation does not count on its own, but may be included as part of broader requirements that meet the criteria outlined above.

Policies adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as the policies apply to and are followed by the institution.

"---" indicates that no data was submitted for this field

How many of the institution's business partners are covered by policies, guidelines and/or agreements that require adherence to minimum environmental standards?:

Some

How many of the institution's business partners are covered by policies, guidelines and/or agreements that require adherence to minimum standards governing employee wages, benefits, working conditions and rights?:

A copy of the policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

Purchasing Policy 4-27-11.docx

The policies, guidelines, and/or agreements with the institution's business partners (or a representative sample):

The following policy was passed by the Campus Greening Council and approved by the President in 2011:

Bucknell University's Green Purchasing Policy

In a conscious effort to recognize its role, responsibility and commitment to the community regarding environmental stewardship, Bucknell University will give preference to purchasing goods that are:

- Durable, as opposed to single use or disposable
- Non-toxic, minimally toxic or biodegradable
- Recyclable
- Manufactured locally
- · Manufactured with minimal waste
- Free of heavy metals
- Eligible to earn LEED credits
- FSC certified
- Chlorine free
- Energy Star, Green Guard, Green Seal, or Green-e certified
- Low VOC content
- Made from rapidly renewable materials
- Delivered with reduced packaging

These goods shall be selected whenever reasonably practical: the preferable goods are readily available; the preferable goods can perform their intended function generally as well as a non-preferable one; and the cost of the preferable goods are either approximately similar to that of non-preferable goods or their higher initial cost can be justified on the basis of long-term benefits.

A brief description of programs and strategies institution has implemented to ensure that the guidelines are followed, including a brief description of instances when the guidelines have changed purchasing behavior, if applicable:

not applicable

The website URL where information about the institution's guidelines for its business partners is available:

Transportation

This subcategory seeks to recognize institutions that are moving toward sustainable transportation systems. Transportation is a major source of greenhouse gas emissions and other pollutants that contribute to health problems such as heart and respiratory diseases and cancer. Due to disproportionate exposure, these health impacts are frequently more pronounced in low-income communities next to major transportation corridors. In addition, the extraction, production, and global distribution of fuels for transportation can damage environmentally and/or culturally significant ecosystems and may financially benefit hostile and/or oppressive governments.

At the same time, campuses can reap benefits from modeling sustainable transportation systems. Bicycling and walking provide human health benefits and mitigate the need for large areas of paved surface, which can help campuses to better manage storm water. Institutions may realize cost savings and help support local economies by reducing their dependency on petroleum-based fuels for transportation.

Credit
Campus Fleet
Student Commute Modal Split
Employee Commute Modal Split
Support for Sustainable Transportation

Responsible Party

Donald Krech

Director of Procurement Procurement Services

Criteria

Institution supports	alternative fuel a	nd powe	r technology	by ir	ncluding	in its n	notorized	vehicle flee	t vehicles i	that are
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- A. Gasoline-electric hybrid
- B. Diesel-electric hybrid
- C. Plug-in hybrid
- D. 100 percent electric
- E. Fueled with Compressed Natural Gas (CNG)
- F. Hydrogen fueled
- G. Fueled with B20 or higher biofuel for more than 4 months of the year

And/or

H. Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year (e.g. fuel contains cooking oil recovered and recycled on campus or in the local community)

For this credit, the institution's motorized fleet includes all cars, carts, trucks, tractors, buses and similar vehicles used for transporting people and/or goods, including both leased vehicles and vehicles that are institution-owned and operated. Heavy construction equipment (e.g. excavators and pavers), maintenance equipment (e.g. lawn-mowers and leaf blowers), and demonstration/test vehicles used for educational purposes are not included in this credit.

Vehicles that meet multiple criteria (e.g. hybrid vehicles fueled with biofuel) should not be double-counted.

"---" indicates that no data was submitted for this field

Total number of vehicles in the institution's fleet:

173

Number of vehicles in the institution's fleet that are::

Number of Vehicles

Gasoline-electric, non-plug-in hybrid	2
Diesel-electric, non-plug-in hybrid	0
Plug-in hybrid	0
100 percent electric	0
Fueled with compressed natural gas (CNG)	0
Hydrogen fueled	0
Fueled with B20 or higher biofuel for more than 4 months of the year	0
Fueled with locally produced, low-level (e.g. B5) biofuel for more than 4 months of the year	0

A brief description of the institution's efforts to support alternative fuel and power technology in its motorized fleet:

The website URL where information about the institution's support for alternative fuel and power technology is available:

Responsible Party

Michelle Beiler

Assistant Professor Civil and Environmental Engineering Civil and Environmental Engineering

Criteria

Institution's students commute to and from campus using more sustainable commuting options such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, or a combination of these options.

Students who live on campus should be included in the calculation based on how they get to and from their classes.

"---" indicates that no data was submitted for this field

Total percentage of students that use more sustainable commuting options:

95.64

The percentage of students that use each of the following modes as their primary means of transportation to get to and from campus::

	Percentage (0-100)
Commute with only the driver in the vehicle (excluding motorcycles and scooters)	4.36
Walk, bicycle, or use other non-motorized means	95.59
Vanpool or carpool	
Take a campus shuttle or public transportation	0.05
Use a motorcycle, scooter or moped	

A brief description of the method(s) used to gather data about student commuting:

The website URL where information about sustainable transportation for students is available:

Responsible Party

Michelle Beiler

Assistant Professor Civil and Environmental Engineering Civil and Environmental Engineering

Criteria

Institution's employees (faculty, staff, and administrators) get to and from campus using more sustainable commuting options such as walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle, telecommuting, or a combination of these options.

Employees who live on campus should be included in the calculation based on how they get to and from their workplace.

Submission Note:

Car pooling data unavailable for this survey.

"---" indicates that no data was submitted for this field

Total percentage of the institution's employees that use more sustainable commuting options:

31

The percentage of the institution's employees that use each of the following modes as their primary means of transportation to and from campus::

	Percentage (0-100)
Commute with only the driver in the vehicle (excluding motorcycles and scooters)	69
Walk, bicycle, or use other non-motorized means	31
Vanpool or carpool	
Take a campus shuttle or public transportation	
Use a motorcycle, scooter or moped	

Telecommute for 50 percent or more of their regular work hours

A brief description of the method(s) used to gather data about employee commuting:

Check Nadia's methods. Sent a survey to staff, faculty and students asking about their movement on campus throughout the day and mode of transportation. Results were based off those who responded.

The website URL where information about sustainable transportation for employees is available:

Support for Sustainable Transportation

Responsible Party

Michelle Beiler

Assistant Professor Civil and Environmental Engineering Civil and Environmental Engineering

Criteria

Part 1

The institution demonstrates its support for active (i.e. non-motorized) transportation on campus in one or more of the following ways:

Option A: Institution:

- Provides secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters. The storage, shower facilities and lockers are co-located in at least one building/location that is accessible to all commuters.
- Provides short-term bicycle parking (e.g. racks) within 50 ft (15 m) of all occupied, non-residential buildings and makes long-term bicycle storage available within 330 ft (100 m) of all residence halls (if applicable).
- Has a "complete streets" or bicycle accommodation policy (or adheres to a local community policy) and/or has a continuous network
 of dedicated bicycle and pedestrian paths and lanes that connects all occupied buildings and at least one inter-modal transportation
 node (i.e. transit stop or station)

And/or

• Has a bicycle-sharing program or participates in a local bicycle-sharing program

Option B: Institution is certified as a Bicycle Friendly University (at any level) by the League of American Bicyclists (U.S.) or under a similar third party certification for non-motorized transportation.

Part 2

Institution has implemented one or more of the following strategies to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting. The institution:

- Offers free or reduced price transit passes and/or operates a free campus shuttle for commuters. The transit passes may be offered by
 the institution itself, through the larger university system of which the institution is a part, or through a regional program provided by
 a government agency.
- Offers a guaranteed return trip (GRT) program to regular users of alternative modes of transportation
- Participates in a car/vanpool or ride sharing program and/or offers reduced parking fees or preferential parking for car/vanpoolers
- Participates in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization
- Has one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters
- · Offers a telecommuting program for employees, either as a matter of policy or as standard practice
- · Offers a condensed work week option for employees, either as a matter of policy or as standard practice
- Has incentives or programs to encourage employees to live close to campus

Submission Note: *In 2008, when the market tanked and gas prices skyrocketed, HR worked with L&IT and Communications to put up a website where people could find other riders to carpool. That, however, is no longer functional, due to lack of interest. Please keep in mind that a substantial number of faculty and staff live closeby. The wellness program has been encouraging people to walk or ride a bicycle to work, and a number of people ride scooters to work when the weather is nice. "---" indicates that no data was submitted for this field Does the institution provide secure bicycle storage (not including office space), shower facilities, and lockers for bicycle commuters?: No A brief description of the facilities for bicycle commuters: Does the institution provide short-term bicycle parking (e.g. racks) within 50 ft (15 m) of all occupied, non-residential buildings and make long-term bicycle storage available within 330 ft (100 m) of all residence halls (if applicable)?: No A brief description of the bicycle parking and storage facilities: Does the institution have a "complete streets" or bicycle accommodation policy (or adhere to a local community policy) and/or have a continuous network of dedicated bicycle and pedestrian paths and lanes?: No A brief description of the bicycle/pedestrian policy and/or network: Does the institution have a bicycle-sharing program or participate in a local bicycle-sharing program?: Yes A brief description of the bicycle sharing program:

Bison Bikes is a bicycle sharing program sponsored by Bucknell Student Government and administered by Bucknell Outdoor Education.

Other strategies

Is the institution certified as a Bicycle Friendly University by the League of American Bicyclists (U.S.) or under a similar third party certification covering non-motorized transportation?:
No
A brief description of the certification, including date certified and level:

Does the institution offer free or reduced price transit passes and/or operate a free campus shuttle for commuters?: Yes
A brief description of the mass transit program(s), (s), including availability, participation levels, and specifics about discounts or subsidies offered (including pre-tax options):
A free shuttle allows Bucknell students, faculty, and staff transportation from campus to downtown Lewisburg, Weis Market, WalMart, and Evangelical Hospital.
Does the institution offer a guaranteed return trip (GRT) program to regular users of alternative modes of transportation?: No
A brief description of the GRT program:
Does the institution participate in a car/vanpool or ride sharing program and/or offer reduced parking fees or preferential parking for car/vanpoolers?: No
A brief description of the carpool/vanpool program:
In the past Message Center has been used to post about carpooling among faculty.
Does the institution participate in a car sharing program, such as a commercial car-sharing program, one administered by the institution, or one administered by a regional organization?: Yes
A brief description of the car sharing program:

Bucknell has partnered with zipcar to provide students and faculty with three cars on campus available to rent on the hourly basis.

Membership is offered to Bucknell faculty, staff, and students for short length trips.

Does the institution have one or more Level 2 or Level 3 electric vehicle recharging stations that are accessible to student and employee commuters?:
Yes
A brief description of the electric vehicle recharging stations:
Bucknell has 3 level 2 charging stations.
Does the institution offer a telecommuting program for employees as a matter of policy or as standard practice?:
No
A brief description of the telecommuting program:
Does the institution offer a condensed work week option for employees as a matter of policy or as standard practice?: Yes
A brief description of the condensed work week program:
Bucknell offers flexible scheduling to staff members, as business operations allow. For example, instead of working 40 hours over 5 days staff members can work 4 10-hour days. There are many options available, including telecommuting on an occasional or regular basis.
Does the institution have incentives or programs to encourage employees to live close to campus?: No
A brief description of the incentives or programs to encourage employees to live close to campus:
Does the institution have other incentives or programs to encourage more sustainable modes of transportation and reduce the impact of student and employee commuting?:
Yes
A brief description of other sustainable transportation initiatives and programs:
Bucknell offers a free shuttle service to downtown Lewisburg and shopping locations.
The website URL where information about the institution's sustainable transportation program(s) is available:

Waste

This subcategory seeks to recognize institutions that are moving toward zero waste by reducing, recycling, and composting. These actions mitigate the need to extract virgin materials, such as trees and metals. It generally takes less energy and water to make a product with recycled material than with virgin resources. Reducing waste generation also reduces the flow of waste to incinerators and landfills which produce greenhouse gas emissions, can contaminate air and groundwater supplies, and tend to have disproportionate negative impacts on low-income communities. Waste reduction and diversion also save institutions costly landfill and hauling service fees. In addition, waste reduction campaigns can engage the entire campus community in contributing to a tangible sustainability goal.

Credit
Waste Minimization
Waste Diversion
Construction and Demolition Waste Diversion
Hazardous Waste Management

Responsible Party

Merritt Pedrick

Associate Director for Operations Facilities

Criteria

Part 1

Institution has implemented source reduction strategies to reduce the total amount of waste generated (materials diverted + materials disposed) per weighted campus user compared to a baseline.

Part 2

Institution's total annual waste generation (materials diverted and disposed) is less than the minimum performance threshold of 0.45 tons (0.41 tonnes) per weighted campus user.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

Total waste generation includes all materials that the institution discards, intends to discard or is required to discard (e.g. materials recycled, composted, donated, re-sold and disposed of as trash) except construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management*.

"---" indicates that no data was submitted for this field

Waste generated::

	Performance Year	Baseline Year
Materials recycled	458.10 <i>Tons</i>	364.79 <i>Tons</i>
Materials composted	1,013 <i>Tons</i>	1,679 Tons
Materials reused, donated or re-sold	4.74 <i>Tons</i>	0 Tons
Materials disposed in a solid waste landfill or incinerator	1,228.09 <i>Tons</i>	1,389.76 Tons

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
Number of residential students	2,973	3,050
Number of residential employees	17	17
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	3,572.20	3,563
Full-time equivalent of employees	1,308.70	1,162
Full-time equivalent of distance education students	0	0

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2012	June 30, 2012
Baseline Year	July 1, 2007	June 30, 2013

A brief description of when and why the waste generation baseline was adopted:

A brief description of any (non-food) waste audits employed by the institution:

In 2011, comprehensive waste audit was conducted on campus. Over ten different dumpsters were sampled and contents were weighed. The waste audit was further described in an honors thesis by Hallie Kennan '12.

A brief description of any institutional procurement policies designed to prevent waste:

Whenever possible, Bucknell specifies products that are durable; made from recycled materials; made of materials that can be recycled; made with materials that require less raw product (e.g. seat cushions are often a mesh material instead of thick foam); delivered in cartons with minimal packaging.

On large orders, Bucknell requires the installer to recycle the packaging.

Our bottle-less water coolers do not require plastic jugs. Since we don't need delivery of bottled water, there are fewer delivery trucks on campus.

A brief description of any surplus department or formal office supplies exchange program that facilitates reuse of materials:

Each summer Bucknell coordinates a supply swap for campus departments. Individuals can pick up recycled items and save their department budget dollars by finding supplies at the swap. Items typically include folders, binders, and plastic organizers.

Two times a year there are open sales of items that no longer have value to the University but still may have value. The sales are primarily furniture, supplies and machinery that have been stored in the warehouse to a period beyond its value compared to the value of the storage space. Procurement runs the sale and funds go back into the Bucknell general account.

A brief description of the institution's efforts to make materials available online by default rather than printing them:

A brief description of any limits on paper and ink consumption employed by the institution:

A brief description of any programs employed by the institution to reduce residence hall move-in/move-out waste:

Bucknell's program is Hidden Treasures/Pay it Forward. Office of civic engagement, facilities, and residential education work together to collect residence hall move-out reusable waste. Last year we collected 2.66 tons of items that were Provided to charities such as American Rescue, Hand Up, Salvation Army and Community aid.

We also make special collection locations and efforts to capture cardboard after residence hall move-in.

A brief description of any other (non-food) waste minimization strategies employed by the institution:

Bucknell also actively searches for reuse of older used classroom and resident hall furniture to charity programs such as Food for the Poor, Hand Up, local churches, etc. This in the past has resulted in tractor trailer loads of furniture staying out of the landfill and being reused.

Recycle solvent cleaning solution in Garage Recycle oil in Garage Ink and toner recycling

Recycle White Goods

Recycle electronic equipment to U.S. Prison

Lead acid battery recycling

Tire recycling

Antifreeze recycling

A brief description of any food waste audits employed by the institution:

In 2013 and 2014, a series of food weighs were conducted in the largest dining venue on campus and estimates were made. The weighs were conducted by students in a foundation seminar course entitled "Mindful Consumption."

A brief description of any programs and/or practices to track and reduce pre-consumer food waste in the form of kitchen food waste, prep waste and spoilage:

Bucknell University Dining prides itself on the service of fresh 'made from scratch' food. As a result of this we process all vegetables from scratch utilizing the trimmings (onion skins, broccoli stalks, carrot peels etc.) to create all of the stocks we use for soups. Because of full utilization of these and other production castoff products (beef trimmings, chicken bones etc.) and a fiscally responsible production system we produce little to no usable pre-service or post production waste.

Three of the primary service areas in our dining facility produce food offerings to order, generating no pre or post-consumer waste. Our primary facility/dining room is open 18 hours a day, 7 days a week. This and our full embrace of batch cooking allow full utilization of food produced.

We operate on an extremely small margin of profitability so serving safe, healthy and fiscally responsible food is our driver. Overproducing and disposing of product is simply unacceptable

A brief description of programs and/or practices to track and reduce post-consumer food waste:

The primary waste produced in our facility is post-consumer waste. We utilize a pulper system which grinds all food plate waste (along with napkins) into a biomass perfect for anaerobic digestion. Before we went tray less we estimate more than 600 # day of this waste was produced and sent to a land fill.

After going tray less we saw a reduction to less than 200 #'s a day of this waste. After finding a suitable partner for composting we were able to compost 13 tons of waste in about 35 weeks of service. Unfortunately the relationship we had with a local farm that was able to utilize this compost ended. We are presently looking at options to continue composting with another partner.

In the fall of 2012 Bucknell hosted author Jonathan Bloom, whose literary focus is the reduction of food waste. After four educational opportunities (Waste Weighs with guests in our facility's tray waste being weighed) over the last 2 years we noted a reduction of the 1.5 oz a plate waste a meal we had measured.

Through a series of student driven classes and informational signage Dining partnered with Bucknell Facilities to raise awareness and reduce food waste.

A brief description of the institution's provision of reusable and/or third party certified compostable to-go containers for to-go food and beverage items (in conjunction with a composting program):

Bucknell University Dining has two programs which utilize either a reusable cup (provided by participants) with a .25 cent discount or a reusable fold over Togo Food Container. The coffee cup program is offered in our Retail Operations and the Food Container is offered in the Resident Dining Program.

All napkins used across campus and 6 and 9 inch plates in both the Retail and Catering Departments are fully compostable. Additionally hot coffee cups in the Resident Dining are compostable.

Bucknell Dining and the University Facilities Department were able to fully compost all Resident Dining post-consumer waste for one year. Unfortunately, this program turned out to not be sustainable and although it composted 13 tons of waste, it ended in 2012. We have been (and continue to be) actively seeking a relationship which would continue our composting initiative.

A brief description of the institution's provision of reusable service ware for "dine in" meals and reusable and/or third party certified compostable service ware for to-go meals (in conjunction with a composting program):

The resident Dining Program uses china; silverware and tumblers for dine in service for approximately 4000 meals a day. This service ware use is in place in two other locations at lunch daily serving an additional 350 guests.

Retail and Resident Dining takeout meals service ware and containers are recyclable but not compostable.

A brief description of any discounts offered to customers who use reusable containers (e.g. mugs) instead of disposable or compostable containers in to-go food service operations:

The 'BE A RE-FILLER' Mug Program offers guests the option to purchase a sticker for 1\$. The sticker is put on the guest's own mug and they receive .25 cents off all future coffee purchase while using that mug. This Program is in use in all Retail operations.

The fold over To Go containers sold in Bostwick (the resident dining program) for cost (what dining pays for them). This 5\$ charge allows no discount but does come with a card which can be used to borrow a second container if a guest needs to. Participants are aware that the use of the container keeps the recyclable To Go's out of use.

These To Go Containers are also used as part of our Healthy Supper Club initiative. They are reused for adult/ family meal replacement meal.

A brief description of other dining services waste minimization programs and initiatives:

We began Composting in April of 2011 and were able to maintain the process until May of 2012! During that time we were able to compost 13 tons of Post-Consumer Waste! After literally years of discussion and planning, Bucknell Dining was able to find and reach an agreement with a local sustainable farm, Rowse House Farms. As of May 2012 we had provided 13 tons of food waste to their Vermee Compost operation. Unfortunately due to disappointing circumstances we had to cease the process with that partner. We are actively seeking a similar arraignment elsewhere and are hopeful we will do so in the near future. We were extremely excited about this initiative as it allowed us to fully utilize the food left on plates after every meal! Currently we are still looking to develop another partnership which would yield the same results.

We've Gone 100% Trayless!

Fall of 2011 The Bostwick Marketplace became Trayless! Our program was modeled after those of 100's of institutions of higher education in the United States and Canada. In the Fall Semester of 2009 we removed trays from the resident dining program two days per week. Of the nearly 4000 meals that were served on Tuesdays and Thursdays we estimated 98% were served without trays. We further estimated a reduction of nearly 150 lbs of tray waste per day from this initiative. On campuses nationwide, this initiative had proven to reduce water usage, food waste and electricity. Over the summer of 2011 modifications to the dish belt will allowed us to remove trays from use in Bostwick.

Commitment to Purchasing Local

All of Eat n' Park Hospitality Group's accounts have focused on purchasing products and ingredients from local and artisan suppliers for more than a decade. In 2011 Bucknell Dining was able to reach 37% of all purchasing being local. All farms and purveyors, in the Farm Source program, are from within 150 miles of Bucknell.

Biodegradable & Recycled Products

Bucknell University Dining Services supports using environmentally friendly supplies and we are working to limit excessive packaging

as well as to fully utilize compostable products wherever possible. The retail dining program utilizes a number of biodegradable to-go containers as well as the recycled paper napkins already in place throughout all of our facilities. We also offer biodegradable service ware in our catering department. A large percentage of our marketing materials are printed on recycled paper, also.

Reusable Mug Program

In partnership with the Environmental Club and the Facilities Department Bucknell University Dining Services has developed the "Be a Refiller" Program. This is a program where for only \$1.00, guests purchase a sticker they place on their own 16 oz mug. This sticker entitles the owner to have a price reduction on 16 oz mugs of coffee at both the Bison and the Library Café.

Retail Sustainability Initiatives

Our Retail Operations have initiated and taken part in a number of partnerships with the Environmental Club and the Facilities Department to offer sustainable catering at athletic events. They also replaced 9 inch foam plates in the Bison with reusable baskets with paper liners.

Dining Sustainability Ambassadors

Starting in the fall of 2008, Bucknell University Dining developed the position of Student Sustainability Coordinator to help define new initiatives important to the student body, and facilitate an ongoing relationship via dialogue with the University. As of 2011, we have renamed the position to Dining Sustainability Ambassadors and have 4 of them working with us; Reilly Price, Olivia Tomeo, Alex Hom and Jessica Ertel.

Food Waste Reduction Initiative

After a visit in 2012 by Jonathan Bloom, (journalist, food waste expert and the author of the book, American Wasteland and the blog Wasted Food) we have held a 'Waste Weigh' in the Bostwick Marketplace. This event resulted in the base measurement of 90 lbs. of tray waste being scraped off guests plates at a Friday lunch. With the help of Professor Nancy White's 'Mindful Consumption' Class we have enhanced our servery with signage to heighten awareness of food waste. We intend to hold more Waste Weighs and compare results.

The website URL where information about the institution's waste minimization initiatives is available:

http://www.bucknell.edu/x4772.xml

Responsible Party

Merritt Pedrick

Associate Director for Operations Facilities

Criteria

Institution diverts materials from the landfill or incinerator by recycling, composting, reusing, donating, or re-selling.

This credit includes on-campus dining services operated by the institution or the institution's primary on-site contractor.

This credit does not include construction, demolition, electronic, hazardous, special (e.g. coal ash), universal and non-regulated chemical waste, which are covered in *OP 24: Construction and Demolition Waste Diversion* and *OP 25: Hazardous Waste Management*.

"---" indicates that no data was submitted for this field

Materials diverted from the solid waste landfill or incinerator:

1,476 Tons

Materials disposed in a solid waste landfill or incinerator:

1,228 Tons

A brief description of programs, policies, infrastructure investments, outreach efforts, and/or other factors that contributed to the diversion rate, including efforts made during the previous three years:

Switched to Single Stream recycling and compaction dumpsters - made recycling easier and included more items.

Residence Hall move-in(cardboard) and move-out (reuse items to charity) recycling programs.

Trayless dining

Converting wood waste to mulch - used on campus

Composting yard waste

Cooking Oil collection and refining

A brief description of any food donation programs employed by the institution:

Bucknell University food donation program would be the Lewisburg Community Garden. A joint project between Bucknell University and the Borough of Lewisburg. The garden features 40 rental plots for groups, families or individuals interested in gardening. This area represents only half of the eighteen thousand square feet the garden occupies. The other half is a community plot. Bucknell student volunteers and interns use this area to grow organic produce that is donated to the community. During the 2013 gardening season the garden cultivated 56 varieties of fruits and vegetables. The garden harvested and donated over 2,500lbs of produce to local hot meal

programs and the food bank. This donation represents a savings of about \$5,500 that our partners save on food costs.

A brief description of any pre-consumer food waste composting program employed by the institution:

Bucknell University Dining prides itself on the service of fresh 'made from scratch' food. As a result of this we process all vegetables from scratch utilizing the trimmings (onion skins, broccoli stalks, carrot peels etc.) to create all of the stocks we use for soups. Because of full utilization of these and other production castoff products (beef trimmings, chicken bones etc.) and a fiscally responsible production system we produce little to no usable pre-service or post production waste.

Three of the primary service areas in our dining facility produce food offerings to order, generating no pre or post-consumer waste. Our primary facility/dining room is open 18 hours a day, 7 days a week. This and our full embrace of batch cooking allow full utilization of food produced.

We operate on an extremely small margin of profitability so serving safe, healthy and fiscally responsible food is our driver. Overproducing and disposing of product is simply unacceptable.

A brief description of any post-consumer food waste composting program employed by the institution:

The primary waste produced in our facility is post-consumer waste. We utilize a pulper system which grinds all food plate waste (along with napkins) into a biomass perfect for anaerobic digestion. Before we went tray less we estimate more than 600 # day of this waste was produced and sent to a land fill.

After going tray less we saw a reduction to less than 200 #'s a day of this waste. After finding a suitable partner for composting we were able to compost 13 tons of waste in about 35 weeks of service. Unfortunately the relationship we had with a local farm that was able to utilize this compost ended. We are presently looking at options to continue composting with another partner.

In the fall of 2012 Bucknell hosted author Jonathan Bloom, whose literary focus is the reduction of food waste. After four educational opportunities (Waste Weighs with guests in our facility's tray waste being weighed) over the last 2 years we noted a reduction of the 1.5 oz a plate waste a meal we had measured.

Through a series of student driven classes and informational signage Dining partnered with Bucknell Facilities to raise awareness and reduce food waste.

Does the institution include the following materials in its waste diversion efforts?:

	Yes or No
Paper, plastics, glass, metals, and other recyclable containers	Yes
Food donations	Yes
Food for animals	No
Food composting	No

Cooking oil	Yes
Plant materials composting	Yes
Animal bedding composting	No
Batteries	Yes
Light bulbs	Yes
Toner/ink-jet cartridges	Yes
White goods (i.e. appliances)	Yes
Laboratory equipment	No
Furniture	Yes
Residence hall move-in/move-out waste	Yes
Scrap metal	Yes
Pallets	Yes
Motor oil	Yes
Tires	Yes

Other materials that the institution includes in its waste diversion efforts:

Antifreeze

Solvents

Electronic Equipment (computers, TV's etc.)

Terracycle - BU Brigade recycles candy wrappers, yogurt containers, etc.

Construction and Demolition Waste Diversion

Responsible Party

Merritt Pedrick

Associate Director for Operations Facilities

Criteria

Institution diverts non-hazardous construction and demolition waste from the landfill and/or incinerator.

Soil and organic debris from excavating or clearing the site do not count for this credit.

"---" indicates that no data was submitted for this field

Construction and demolition materials recycled, donated, or otherwise recovered:

2,550.02 Tons

Construction and demolition materials landfilled or incinerated:

214.55 Tons

A brief description of programs, policies, infrastructure investments, outreach efforts, and/or other factors that contributed to the diversion rate for construction and demolition waste:

For the performance year (FY 12-13), the only major construction project on campus was the construction of the new classroom building, Academic West. This was a LEED project, and all construction waste was handled according to LEED guidelines.

Hazardous Waste Management

Responsible Party

Gregg Rokavec

Assistant Director of Risk Management Environmental Health and Safety

Criteria

Part 1

Institution has strategies in place to safely dispose of all hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste and seeks to minimize the presence of these materials on campus.

Part 2

Institution has a program in place to recycle, reuse, and/or refurbish electronic waste generated by the institution and/or its students. Institution takes measures to ensure that the electronic waste is recycled responsibly, for example by using a recycler certified under the e-Stewards and/or R2 standards.

Submission Note:

Above website is available only to the Bucknell community and requires a password.

"---" indicates that no data was submitted for this field

Does the institution have strategies in place to safely dispose of all hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste and seek to minimize the presence of these materials on campus?:

Yes

A brief description of steps taken to reduce hazardous, special (e.g. coal ash), universal, and non-regulated chemical waste:

As part of our Hazardous waste program, we have established procedures for waste minimization. Additionally every 5 years we report a source reduction strategy to the PA Dept. of Environmental Protection.

A brief description of how the institution safely disposes of hazardous, universal, and non-regulated chemical waste:

We have implemented a comprehensive Waste program that instructs and manages all waste generated across the University. This includes identification, collect and segregation of all waste generated. Waste is collected from locations throughout campus, relocated to one central storage area and then prepared for shipment every 90 days.

A brief description of any significant hazardous material release incidents during the previous three years, including volume, impact and response/remediation:
none to report
A brief description of any inventory system employed by the institution to facilitate the reuse or redistribution of laboratory chemicals:
The University uses CEMS (Chemical Environmental Management system) that all chemicals are rec'd into inventory, barcoded with specific data in regards to location, user and hazards. When the chemical is consumed it is removed from inventory.
Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish all electronic waste generated by the institution?:
Yes
Does the institution have or participate in a program to responsibly recycle, reuse, and/or refurbish electronic waste generated by students?:
Yes
A brief description of the electronic waste recycling program(s):
Collection of electronics is managed by Environmental Health and Safety, electronics are sent to Lewisburg UNICOR for recycling.
A brief description of steps taken to ensure that e-waste is recycled responsibly, workers' basic safety is protected,
and environmental standards are met:
Unicor maintains safety and environmental programs.
The website URL where information about the institution's hazardous and electronic-waste recycling programs is

available:

https://my.bucknell.edu/x52666.html

Water

This subcategory seeks to recognize institutions that are conserving water, making efforts to protect water quality and treating water as a resource rather than a waste product. Pumping, delivering, and treating water is a major driver of energy consumption, so institutions can help reduce energy use and the greenhouse gas emissions associated with energy generation by conserving water. Likewise, conservation, water recycling and reuse, and effective rainwater management practices are important in maintaining and protecting finite groundwater supplies. Water conservation and effective rainwater and wastewater management also reduce the need for effluent discharge into local surface water supplies, which helps improve the health of local water ecosystems.

Credit	
Water Use	
Rainwater Management	
Wastewater Management	

Responsible Party

Greg Koontz

Associate Director Utilities Maintenance Facilities

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Part 1

Institution has reduced its potable water use per weighted campus user compared to a baseline.

Part 2

Institution has reduced its potable water use per gross square foot/metre of floor area compared to a baseline.

Part 3

Institution has reduced its total water use (potable + non-potable) per acre/hectare of vegetated grounds compared to a baseline.

"---" indicates that no data was submitted for this field

Level of water risk for the institution's main campus:

Medium to High

Total water use::

	Performance Year	Baseline Year
Total water use	100,342,900 Gallons	94,660,635 <i>Gallons</i>

Potable water use::

	Performance Year	Baseline Year
Potable water use	100,342,900 Gallons	94,660,635 <i>Gallons</i>

Figures needed to determine "Weighted Campus Users"::

	Performance Year	Baseline Year
--	------------------	---------------

Number of residential students	2,973	3,050
Number of residential employees	17	17
Number of in-patient hospital beds	0	0
Full-time equivalent enrollment	3,527.20	3,563
Full-time equivalent of employees	1,308.70	1,162
Full-time equivalent of distance education students	0	0

Gross floor area of building space::

	Performance Year	Baseline Year
Gross floor area	2,711,874 Square Feet	2,500,000 Square Feet

Area of vegetated grounds::

	Performance Year	Baseline Year
Vegetated grounds	365 Acres	386 Acres

Start and end dates of the performance year and baseline year (or three-year periods):

	Start Date	End Date
Performance Year	July 1, 2012	June 30, 2013
Baseline Year	July 1, 2007	June 30, 2008

A brief description of when and why the water use baseline was adopted:

The baseline of fiscal year 2008 for water usage was adopted to keep the numbers consistent with Bucknell's Comprehensive Environmental Assessment conducted and completed in 2008. This comprehensive report is the most recent document that measures all aspects of Bucknell's campus with respect to sustainability. It was also adopted to keep the baseline used for all other reporting sections consistent.

Water recycled/reused on campus, performance year:
Recycled/reused water withdrawn from off-campus sources, performance year:

A brief description of any water recovery and reuse systems employed by the institution:
A brief description of any water metering and management systems employed by the institution:
All buildings on campus are metered for their water usage in some way. Many larger buildings, such as academic buildings and dorms, do not have their own water meters, meaning that a few meters track water usage for multiple buildings. Many smaller buildings, mostly small administrative buildings and residential homes, have their own water meters that track water usage for those buildings only.
A brief description of any building retrofit practices employed by the institution, e.g. to install high efficiency plumbing fixtures and fittings:
All building renovations, construction projects, and new buildings completed since 1992 have low flow water fixtures (1.0 gpf urinals, 1.28 gpf toilets, 2.5 gpm shower-heads, and 1.5 gpm sinks). A few buildings on campus built within the last two years are LEED certified and have more efficient fixtures (0.125 gpf urinals, 1.28 gpf toilets, 1.5 gpm shower-heads, and 0.5 gpm sinks). Some other spots on campus have dual-flush toilets.
A brief description of any policies or programs employed by the institution to replace appliances, equipment and systems with water-efficient alternatives:
The Bucknell Green Fund, a revolving fund that subsidizes student-led projects that make the campus more sustainable and that pay themselves back within seven years, has funded a project that has replaced outdated fixtures in a residential campus home with efficient water fixtures this past year. Additionally, last summer, the Bucknell Environmental Center funded a student to complete a comprehensive assessment of Bucknell's water usage. A complete payback analysis for installing low-flow fixtures for 16 of the highest water-wasting buildings on campus was conducted by the student. Bucknell plans to pursue and fund the renovations project for these 16 buildings this fall.
A brief description of any water-efficient landscape design practices employed by the institution (e.g. xeriscaping):

A brief description of any weather-informed irrigation technologies employed by the institution:

A brief description of other water conservation and efficiency strategies employed by the institution:		
The website URL where information about the institution's water conservation and efficiency initiatives is available:		

Rainwater Management

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Part 1

Institution uses Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects that increase paved surface area on campus or otherwise significantly change the campus grounds.

The policy, plan, and/or strategies cover the entire campus. While the specific strategies or practices adopted may vary depending on project type and location, this credit is reserved for institutions that mitigate rainwater runoff impacts consistently during new construction. Implementing a strategy or strategies for only one new development project is not sufficient for Part 1 of this credit.

Part 2

Institution has adopted a rainwater/stormwater management policy, plan, and/or strategies that mitigate the rainwater runoff impacts of ongoing campus operations and treat rainwater as a resource rather than as a waste product.

The policy, plan, and/or strategies address both the quantity and quality (or contamination level) of rainwater runoff through the use of green infrastructure. Though specific practices adopted may vary across the campus, the policy, plan, and/or strategies cover the entire institution. Implementing strategies for only one building or area of campus is not sufficient for Part 2 of this credit.

Policies adopted by entities of which the institution is part (e.g. state government or the university system) may count for both parts of this credit as long as the policies apply to and are followed by the institution.

"---" indicates that no data was submitted for this field

Does the institution use Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects?:

Yes

A brief description of the institution's Low Impact Development (LID) practices:

Since 2012 all new construction has included LID stormwater retention as part of the site design and development. This includes two new fraternity houses, a new academic building, and a series of residence halls.

Has the institution adopted a rainwater/stormwater management policy, plan, or strategies that mitigate the rainwater runoff impacts of ongoing campus operations through the use of green infrastructure? : Yes
A brief description of the institution's rainwater/stormwater management policy, plan, and/or strategies for ongoing campus operations:
Strategies in use on campus include 3 green roofs, several rain gardens, and a bioswale.
A brief description of any rainwater harvesting employed by the institution:
The Environmental Center employs rain barrels for irrigation in its native plants garden.
Rainwater harvested directly and stored/used by the institution, performance year:
A brief description of any rainwater filtering systems employed by the institution to treat water prior to release:
A brief description of any living or vegetated roofs on campus:
Two green roofs are in place on the Dana Engineering building. One is modular, and one is integrated. There is a much larger modular green roof on the Academic West Building. All three roofs are planted with a variety of sedum species, and one of the green roofs on Dana Engineering is instrumented for research.
A brief description of any porous (i.e. permeable) paving employed by the institution:
A brief description of any downspout disconnection employed by the institution:
A brief description of any rain gardens on campus:
Rain gardens are present at the Environmental Center and Academic West. Most of these are excavated areas lined with gravel at the bottom and planted with a variety native plants on the sloping sides.
A brief description of any stormwater retention and/or detention ponds employed by the institution:

A series of stormwater retention ponds have been constructed to manage the runoff from the new fraternity houses and residence halls on the South Campus. These bowl-shaped structures planted with native grasses and perennials form a chain of retention basins which successively retain runoff during storm events, reducing runoff speed and volume to the Susquehanna River.

A brief description of any bioswales on campus (vegetated, compost or stone):

The South Campus residential area also employs a bioswale as part of its stormwater runoff mitigation strategy. The bioswale is planted with native perennials and grasses, and runs parallel to the service road to the residence halls. The bioswale channels stormwater in a series of steps toward the retention ponds mentioned above.

A brief description of any other rainwater management technologies or strategies employed by the institution:

The website URL where information about the institution's rainwater management initiatives, plan or policy is available:

Responsible Party

Greg Koontz

Associate Director Utilities Maintenance Facilities

Criteria

Institution's wastewater is handled naturally on campus or in the local community. Natural wastewater systems include, but are not limited to, constructed treatment wetlands and Living Machines. To count, wastewater must be treated to secondary or tertiary standards prior to release to water bodies.

This credit recognizes natural handling of the water discharged by the institution. On-site recycling/reuse of greywater and/or blackwater is recognized in *OP 26: Water Use*.

Submission Note:

Total wastewater discharged is calculated for the 2013 fiscal year to keep it consistent with and comparable to total water used.

"---" indicates that no data was submitted for this field

Total wastewater discharged:

74,790,200 Gallons

Wastewater naturally handled:

0 Gallons

A brief description of the natural wastewater systems used to handle the institution's wastewater:

The website URL where information about the institution's wastewater management practices is available:

Planning & Administration

Coordination, Planning & Governance

This subcategory seeks to recognize colleges and universities that are institutionalizing sustainability by dedicating resources to sustainability coordination, developing plans to move toward sustainability, and engaging students, staff and faculty in governance. Staff and other resources help an institution organize, implement, and publicize sustainability initiatives. These resources provide the infrastructure that fosters sustainability within an institution. Sustainability planning affords an institution the opportunity to clarify its vision of a sustainable future, establish priorities and help guide budgeting and decision making. Strategic planning and internal stakeholder engagement in governance are important steps in making sustainability a campus priority and may help advocates implement changes to achieve sustainability goals.

Credit
Sustainability Coordination
Sustainability Planning
Governance

Sustainability Coordination

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution has at least one sustainability committee, office, and/or officer tasked by the administration or board of trustees to advise on and implement policies and programs related to sustainability on campus. The committee, office, and/or officer focus on sustainability broadly (i.e. not just one sustainability issue, such as climate change) and cover the entire institution.

An institution that has multiple committees, offices and/or staff with responsibility for subsets of the institution (e.g. schools or departments) may earn points for this credit if it has a mechanism for broad sustainability coordination for the entire campus (e.g. a coordinating committee or the equivalent). A committee, office, and/or officer that focuses on just one department or school within the institution does not count for this credit in the absence of institution-wide coordination.

Submission Note:

Since the performance year, some significant changes to sustainability programming have occurred at the University. Most notably the Bucknell University Environmental Center has changed to the Bucknell Center for Sustainability and the Environment, and the Campus Greening Initiative has changed to the Sustainable Design Program. As a result, the content of the associated websites may reflect these changes.

"---" indicates that no data was submitted for this field

Does the institution have at least one sustainability committee, office, and/or officer that focuses on sustainability broadly and covers the entire institution?:

Yes

A brief description of the activities and substantive accomplishments of the committee(s), office(s), and/or officer(s) during the previous three years:

Bucknell has both a Campus Greening Council and a Campus Greening Initiative. The Campus Greening Council has overseen the university's compliance with the President's Climate Commitment since 2008, has established and maintained the university's Green Fund since 2011, and has presented several policy proposals to the Operations and Management regarding Campus Sustainability. These include a recycled paper purchasing policy, a sustainable purchasing policy, and a green building policy.

The Campus Greening Initiative's director overseen a comprehensive environmental assessment of the university in 2009, a comprehensive waste audit in 2011, and several demonstration projects employing ecological design and renewable energy on campus.

The charter or mission statement of the committee(s) or a brief description of each committee's purview and activities: $ \frac{1}{2} \int_{\mathbb{R}^{n}} \frac{ds}{s} \int$
https://www.bucknell.edu/Documents/EnvironmentalCenter/Campus%20Greening%20Council%20Charge%20U
pdated.pdf
Members of each committee, including affiliations and role (e.g. staff, student, or faculty):
https://www.bucknell.edu/Documents/EnvironmentalCenter/CGCMemberList.docx
The website URL where information about the sustainability committee(s) is available: http://www.bucknell.edu/x49294.xml
Does the institution have at least one sustainability office that includes more than 1 full-time equivalent (FTE) employee?: Yes
A brief description of each sustainability office:
The Environmental Center employs three full time Initiative Directors, a full time Executive Director, and a full time Operations Coordinator.
Bucknell Facilities employs a full time energy manager.
Full-time equivalent (FTE) of people employed in the sustainability office(s):
The website URL where information about the sustainability office(s) is available: http://www.bucknell.edu/EnvironmentalCenter
Does the institution have at least one sustainability officer?: Yes

Name and title of each sustainability officer:

Dina El-Mogazi, director, Campus Greening Initiative

A brief description of each sustainability officer position:

Serves as the primary facilitator and coordinator for environmental sustainability projects on campus

The website URL where information about the sustainability officer(s) is available:

http://www.bucknell.edu/CampusGreening

Sustainability Planning

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Institution has current and formal plans to advance sustainability. The plan(s) cover one or more of the following areas:

- Curriculum
- Research (or other scholarship appropriate for the institution)
- · Campus Engagement
- Public Engagement
- Air & Climate
- · Buildings
- Dining Services/Food
- Energy
- Grounds
- Purchasing
- Transportation
- Waste
- Water
- Diversity & Affordability
- Health, Wellbeing & Work
- Investment
- Other

The plan(s) may include measurable objectives with corresponding strategies and timeframes to achieve the objectives.

The criteria may be met by any combination of formally adopted plans, for example:

- Strategic plan or equivalent guiding document
- Campus master plan or physical campus plan
- Sustainability plan
- Climate action plan
- Human resources strategic plan
- · Diversity plan

For institutions that are a part of a larger system, plans developed at the system level are eligible for this credit.

Does the institution have current and formal plans to advance sustainability in the following areas? Do the plans include measurable objectives?:

	Current and Formal Plans (Yes or No)	Measurable Objectives (Yes or No)
Curriculum	Yes	Yes
Research (or other scholarship)	No	No
Campus Engagement	No	No
Public Engagement	No	No
Air and Climate	Yes	Yes
Buildings	No	No
Dining Services/Food	No	No
Energy	Yes	Yes
Grounds	No	No
Purchasing	No	No
Transportation	No	No
Waste	No	No
Water	No	No
Diversity and Affordability	Yes	Yes
Health, Wellbeing and Work	No	No
Investment	No	No

Other		
A brief description of the plan(s) to adv	vance sustainability in Curriculum:	
Bucknell's College of Arts and Sciences has a sustainability education: Environmental Conn		_
The measurable objectives, strategies a	nd timeframes included in the Curricul	um plan(s):
Each of the Arts and Sciences requirements as procedure. See the College Core Curriculum of		llum (see above) has its own assessment
http://www.bucknell.edu/arts-and-sciences-co	ollege-of/college-core-curriculum.html	
Accountable parties, offices or departm	nents for the Curriculum plan(s):	
College of Arts and Sciences, College Core C	urriculum coodinator	
A brief description of the plan(s) to adv	vance sustainability in Research (or other	er scholarship):
The measurable objectives, strategies a	nd timeframes included in the Research	n plan(s):
Accountable parties, offices or departm	nents for the Research plan(s):	
A brief description of the plan(s) to adv	vance Campus Engagement around sust	ainability:
The measurable objectives, strategies a	nd timeframes included in the Campus	Engagement plan:
Accountable parties, offices or departm	nents for the Campus Engagement plan	(s):

A brief description of the plan(s) to advance Public Engagement around sustainability:
The measurable objectives, strategies and timeframes included in the Public Engagement plan(s):
Accountable parties, offices or departments for the Public Engagement plan(s):
A brief description of the plan(s) to advance sustainability in Air and Climate:
This is covered in the Universities Climate Action plan published in 2010. The measurable objectives, strategies and timeframes included in the Air and Climate plan(s):
The objectives of the climate plan are for a 10% reduction in greenhouse gas emissions by 2015, A 20% reduction by 2020 and a carbon neutrality by 2030. 2008 is the baseline year for these reductions.
Accountable parties, offices or departments for the Air and Climate plan(s): Bucknell Facilities and Bucknell University Environmental Center are the accountable offices for the Climate Action plan.
A brief description of the plan(s) to advance sustainability in Buildings:
The measurable objectives, strategies and timeframes included in the Buildings plan(s):
Accountable parties, offices or departments for the Buildings plan(s):
A brief description of the plan(s) to advance sustainability in Dining Services/Food:

The measurable objectives, strategies and timeframes included in the Dining Services/Food plan(s):		
Accountable parties, offices or departments for the Dining Services/Food plan(s):		
		
A brief description of the plan(s) to advance sustainability in Energy:		
The University Facilities Energy Team assesses energy usage in buildings and systems using a wide variety of resources and provides energy efficiency retrofits and strategies for the community campus wide. Evaluation of performance through continuous tracking of energy use allows team and community education to continuously evolve and improve thus reducing total campus energy consumption. The Energy Team makes its plans and progress available to the campus in a quarterly report.		
The measurable objectives, strategies and timeframes included in the Energy plan(s):		
For the last several years, Energy Team has maintained the goal of a 2% reduction in energy consumption each year. Its quarterly report tracks progress toward this goal.		
Accountable parties, offices or departments for the Energy plan(s):		
Responsible parties are the Facilities Energy Team, particularly the Campus Energy Manager and the Associate Director for Co-generation and Utilities		
A brief description of the plan(s) to advance sustainability in Grounds:		
The measurable objectives, strategies and timeframes included in the Grounds plan(s):		
		
Accountable parties, offices or departments for the Grounds plan(s):		
A brief description of the plan(s) to advance sustainability in Purchasing:		

The measurable objectives, strategies and timeframes included in the Purchasing plan(s):
Accountable parties, offices or departments for the Purchasing plan(s):
A brief description of the plan(s) to advance sustainability in Transportation:
The measurable objectives, strategies and timeframes included in the Transportation plan(s):
Accountable parties, offices or departments for the Transportation plan(s):
A brief description of the plan(s) to advance sustainability in Waste:
The measurable objectives, strategies and timeframes included in the Waste plan(s):
Accountable parties, offices or departments for the Waste plan(s):
A brief description of the plan(s) to advance sustainability in Water:
The measurable objectives, strategies and timeframes included in the Water plan(s):
Accountable parties, offices or departments for the Water plan(s):

A brief description of the plan(s) to advance Diversity and Affordability:
The President's Diversity Council has adopted a five-year diversity plan. The full plan can be viewed here:
http://www.bucknell.edu/Documents/Provost/Diversity/DiversityPlan.pdf
The measurable objectives, strategies and timeframes included in the Diversity and Affordability plan(s):
The Diversity Plan lists four major goals with specific strategies and timeframes. See
http://www.bucknell.edu/Documents/Provost/Diversity/DiversityPlan.pdf
Accountable parties, offices or departments for the Diversity and Affordability plan(s):
Function of the control of the contr
Office of the Provost, President's Diversity Council, Associate Provost for Diversity
A brief description of the plan(s) to advance sustainability in Health, Wellbeing and Work:
The measurable objectives, strategies and timeframes included in the Health, Wellbeing and Work plan(s):

Accountable parties, offices or departments for the Health, Wellbeing and Work plan(s):
A brief description of the plan(s) to advance sustainability in Investment:
The measurable objectives, strategies and timeframes included in the Investment plan(s):

Accountable parties, offices or departments for the Investment plan(s):
A brief description of the plan(s) to advance sustainability in other areas:
The measurable objectives, strategies and timeframes included in the other plan(s):
Accountable parties, offices or departments for the other plan(s):
The institution's definition of sustainability:
Does the institution's strategic plan or equivalent guiding document include sustainability at a high level?:
A brief description of how the institution's strategic plan or equivalent guiding document addresses sustainability:
The website URL where information about the institution's sustainability planning is available:

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

Part 1

Institution's students participate in governance in one or more of the following ways:

- A. All enrolled students, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)
- B. There is at least one student representative on the institution's governing body. To count, student representatives must be elected by their peers or appointed by a representative student body or organization.

And/or

C. Students have a formal role in decision-making in regard to one or more of the following:

- Establishing organizational mission, vision, and/or goals
- Establishing new policies, programs, or initiatives
- · Strategic and long-term planning
- Existing or prospective physical resources
- Budgeting, staffing and financial planning
- Communications processes and transparency practices
- Prioritization of programs and projects

Part 2

Institution's staff participate in governance in one or more of the following ways:

- A. All staff members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)
- B. There is at least one non-supervisory staff representative on the institution's governing body. To count, staff representatives must be elected by their peers or appointed by a representative staff body or organization.

And/or

C. Non-supervisory staff have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Part 3

Institution's faculty participate in governance in one or more of the following ways:

A. All faculty members, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)

B. There is at least one teaching or research faculty representative on the institution's governing body. To count, faculty representatives must be elected by their peers or appointed by a representative faculty body or organization.

And/or

C. Faculty have a formal role in decision-making in regard to one or more of the areas outlined in Part 1.

Participatory or shared governance bodies, structures and/or mechanisms may be managed by the institution (e.g. committees, councils, senates), by stakeholder groups (e.g. student, faculty and staff committees/organizations), or jointly (e.g. union/management structures).

Structures or mechanisms adopted by entities of which the institution is part (e.g. government or university system) may count for this credit as long as they apply and are adhered to by the institution.

Submission Note:

No single responsible party could be identified for this survey. Answers were collected by a student intern from various contributors as follows: Student governance information was provided by Kari Conrad, Associate Dean of Students and BSG Advisor. Staff governance information was provided by Marcia Hoffman, Executive Director, Human Resources. Faculty governance information was provided by Kim Daubman, Chair of the Faculty Council.

"---" indicates that no data was submitted for this field

Do all enrolled students, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which students have an avenue to participate in one or more governance bodies:

Students have an avenue to participate in one or more governance bodies at the University. Bucknell Student Government (BSG) is a body of elected undergraduate students charged representing the general student body in University affairs. In addition to serving on Class Congresses, each BSG representative also serves on a Congressional Committee. Each of these committees serves a unique function in improving different facets of University life. These committees include academic affairs, community affairs, fiscal affairs, internal affairs, committee on diversity, public affairs, student affairs, and student engagement.

Is there at least one student representative on the institution's governing body who was elected by peers or appointed by a representative student body or organization?:

Yes

A brief description of student representation on the governing body, including how the representatives are selected:

Student representation is outlined in the BSG Constitution available at this url:

https://getinvolved.bucknell.edu/organization/bsg/.../View/138713

Do students have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal student role in regard to each area indicated, including examples from the previous three years:

Students have roles in all of the above via Bucknell Student Government and affiliated committees.

Do all staff, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which all staff have an avenue to participate in one or more governance bodies:

The University provides opportunities for staff members to participate in the exchange of information concerning all aspects of the campus community. Listed are several of those opportunities. There are two personnel committees, that regular members of the staff can participate in, the APC and the SSPC. The Administrative Personnel Committee (APC) is a standing committee established to assist in the development or revision of personnel policies for the administrative staff. The Administrative Personnel Committee shall assist in promoting effective communication and discussion about personnel matters among administrative staff and the Office of the President.

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The six-member Committee serves in an advisory capacity to the President and the Operations and Management Group. The Support Staff Personnel Committee (SSPC) is a standing committee established to assist in the development or revision of personnel policies for all regular full-time and regular part-time members of the support staff, and to promote effective communication and discussion about personnel matters among the hourly staff. The six-member Committee serves in an advisory capacity to the President and the Operations and Management Group.

p. 15 under information sharing -- administrative personnel committee, and support staff personnel committee. Each committee is made up of six staff members. Administrative staff are salary individuals. Support staff are the hourly individuals. Elections are held for those who serve in those roles, an advisory body. They can propose policies and make suggestions for changes, bring forward new ideas. Mechanisms are the APC, the university staff forum, the coming together to get information about the university.

Is there at least one non-supervisory staff representative on the institution's governing body who was elected by peers or appointed by a representative staff body or organization?:

Yes

A brief description of non-supervisory staff representation on the governing body, including how the representatives are selected:

There are two members of the support staff that were elected to serve on the University's planning and budgeting committee. There are two hourly people and one salary person serving on the committee. Reps are selected via nomination and then regular election.

Do non-supervisory staff have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	No
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	No
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal staff role in regard to each area indicated, including examples from the previous three years:

In fiscal year 13 - 14 the APC and SSPC proposed two new paid leave policies for the staff. the Community service policy (provides one day paid leave in a persons home area) and Building Bridges policy (allows bucknell sponsers to do work with building bridges). Bucknell University encourages staff members to partner with communities, both nearby and around the world, as part of the 4th pillar in The Plan for Bucknell, Build Bridges. As part of this commitment, and to foster a more active and intentional staff role in contributing to a campus community that is student-centered and service-oriented, eligible staff members can request paid Building Bridges leaves to participate in University- sponsored student excursions, projects or trips. Furthermore, The community service leave is intended to promote staff member involvement in the community, consistent with the University's commitment to partnering with communities, both nearby and around the world, as part of the 4th pillar in the Plan for Bucknell, Build Bridges.

With supervisory approval, benefits-eligible members of the exempt and non-exempt staff can designate one work day per calendar year as community service leave in order to volunteer during normal working hours. This benefit is available for regular benefits-eligible full-time and part-time staff members on the hourly and salaried staff. It does not apply to weekend or evening activities unless those hours are part of the staff member's normal working hours. (pp. 49, 50, 52)

Do all faculty, regardless of type or status, have an avenue to participate in one or more governance bodies (through direct participation or the election of representatives)?:

Yes

A brief description of the mechanisms through which all faculty (including adjunct faculty) have an avenue to participate in one or more governance bodies:

The faculty of the University participates in University Governance by formulating and recommending policies and procedures through faculty meetings, standing committees, the University Council and the Faculty Council.

Is there at least one teaching or research faculty representative on the institution's governing body who was elected by peers or appointed by a representative faculty body or organization?:

Yes

A brief description of faculty representation on the governing body, including how the representatives are selected:

The Bucknell University Board of Trustees, a self-perpetuating body elected to represent the University as a whole, has full authority and responsibility for the conduct of the University.

The current Trustee bylaws call for seven standing committees of the Board of Trustees: Executive Committee; Academic Affairs and Campus Life Committee; Audit, Compliance and Risk Management Committee; Development and External Relations Committee; Finance Committee; Investments Committee; Trusteeship Committee.

Faculty may serve as representatives to the following committees of the Board of Trustees (Academic Affairs and Campus Life Committee; Development and External Relations Committee; Finance Committee.) These representatives, as well as the Chair of the Faculty and the Secretary of the Faculty, are invited to attend the fall, winter, and spring meetings of the Board of Trustees. Faculty representatives to Trustee committees will be determined in the following way:

To the Committee on Academic Affairs and Student Life: The chairs of Committee on Instruction, Committee on Campus and Student Life, and Committee on Athletics. If the chair of any of these designated committees is not a non-administrator faculty member, the faculty members of that committee will elect a faculty member of the committee as the representative.

To the Committee on Finance: The chairs of Committee on Planning and Budget and Committee on Faculty and Academic Personnel. If the chair of either of these committees is not a non-administrator faculty member, the faculty members of that committee will elect a faculty member of the committee as the representative.

To the Committee on Development and External Relations: Two members selected by and from the Faculty Council.

If any of the designated trustee committees work through subcommittees, the chairs may invite the faculty representatives from their Campus Sustainability Data Collector | AASHE Snapshot | Page 187

committees to participate in the subcommittees.

No faculty members are voting members of any trustee committees.

Do faculty have a formal role in decision-making in regard to the following?:

	Yes or No
Establishing organizational mission, vision, and/or goals	Yes
Establishing new policies, programs, or initiatives	Yes
Strategic and long-term planning	Yes
Existing or prospective physical resources	Yes
Budgeting, staffing and financial planning	Yes
Communications processes and transparency practices	Yes
Prioritization of programs and projects	Yes

A brief description of the formal faculty role in regard to each area indicated, including examples from the previous three years:

The Faculty Council is charged with the operation of a responsive and inclusive faculty governance system. In addition, Faculty Council helps to set the long-term agenda of the faculty and facilitates communication between the faculty and the administration. The Faculty Council consists of the Faculty Chair, the Faculty Secretary, one elected faculty representative from each of the academic divisions (engineering, humanities, natural sciences and mathematics, and social sciences), and one elected, at-large untenured faculty member. The Faculty Council meets on a monthly basis with members of the senior administration (Operations & Management Group).

The website URL where information about the institution's governance structure is available:

https://my.bucknell.edu/x54648.html

Diversity & Affordability

This subcategory seeks to recognize institutions that are working to advance diversity and affordability on campus. In order to build a sustainable society, diverse groups will need to be able to come together and work collaboratively to address sustainability challenges. Members of racial and ethnic minority groups and immigrant, indigenous and low-income communities tend to suffer disproportionate exposure to environmental problems. This environmental injustice happens as a result of unequal and segregated or isolated communities. To achieve environmental and social justice, society must work to address discrimination and promote equality. The historical legacy and persistence of discrimination based on racial, gender, religious, and other differences makes a proactive approach to promoting a culture of inclusiveness an important component of creating an equitable society. Higher education opens doors to opportunities that can help create a more equitable world, and those doors must be open through affordable programs accessible to all regardless of race, gender, religion, socio-economic status and other differences. In addition, a diverse student body, faculty, and staff provide rich resources for learning and collaboration.

Credit
Diversity and Equity Coordination
Assessing Diversity and Equity
Support for Underrepresented Groups
Support for Future Faculty Diversity
Affordability and Access

Diversity and Equity Coordination

Responsible Party

Bridget Newell

Associate Provost for Diversity
Provost's Office

Criteria

Part 1

Institution has a diversity and equity committee, office and/or officer tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity and equity on campus. The committee, office and/or officer focuses on student and/or employee diversity and equity.

Part 2

Institution makes cultural competence trainings and activities available to all members of one or more of the following groups:

- Students
- Staff
- Faculty
- Administrators

Submission Note:

The website URL where information about the cultural competence trainings is available: Will be available on new website, August 2014.

"---" indicates that no data was submitted for this field

Does the institution have a diversity and equity committee, office, and/or officer tasked by the administration or governing body to advise on and implement policies, programs, and trainings related to diversity and equity on campus?:

Yes

Does the committee, office and/or officer focus on one or both of the following?:

	Yes or No
Student diversity and equity	Yes

A brief description of the diversity and equity committee, office and/or officer, including purview and activities:

Associate Provost for Diversity: charged with institutionalizing Bucknell's diversity and inclusion efforts, tied to the "Enhance Diversity" pillar of the Bucknell Plan, including leading the effort to develop the 2014-2019 Diversity Plan (strategic plan) and overseeing its implementation along with the President's Diversity Council. Areas of focus: campus composition/demographics, campus culture and climate, student learning, practices and policies. President's Diversity Council Mission:

The President's Diversity Council is an advisory and leadership team responsible for developing, overseeing, and monitoring university-wide efforts to achieve Bucknell's commitment to diversity as a core institutional and educational value. The Council's overarching focus is to enhance and maintain Bucknell's efforts to ensure that all students graduate with knowledge, skills, and habits of mind necessary for making thoughtful, responsible contributions in a diverse, globally integrated world. Directly tied to this is a focus on establishing and maintaining a thriving, inclusive campus climate that values all faculty, students, and staff members.

Specifically, the Council develops and oversees the implementation of Bucknell's Strategic Plan for Diversity; assesses, monitors, and reports on progress toward achieving strategic diversity goals; and reviews and revises (as needed) Bucknell's diversity goals and strategies. Primary areas of focus include (1) diversity of the faculty, staff, and student bodies; (2) campus culture and climate; (3) curricular and co-curricular diversity-centered learning opportunities; and (4) institutional practices and policies.

The Council recognizes the importance of sharing information as well as soliciting and responding to feedback from members of the campus community. As advocates for diversity, inclusiveness, and equity the Council values and promotes cross-campus collaboration; consults with faculty, staff, and campus offices; and regularly supports and participates in diversity enrichment opportunities

The full-time equivalent of people employed in the diversity and equity office:

10

The website URL where information about the diversity and equity committee, office and/or officer is available: http://www.bucknell.edu/diversityandinclusion

Does the institution make cultural competence trainings and activities available to all members of the following groups?:

	Yes or No
Students	
Staff	Yes
Faculty	Yes
Administrators	Yes

A brief description of the cultural competence trainings and activities:

Focus on the following topics: What is cultural competency? Why is it important/relevant to Bucknell University and your specific office and role on campus? How do people become culturally competent? Goals and next steps for participants.

Interactive workshop, tailored to offices as needed, ends with reflection and plan for action

Ideal timeframe: 4 hours, tailored to time availability of offices, 1.5 hour minimum; could be in two sessions. This is part of a series of trainings that has recently been developed by the Associate Provost for Diversity in consultation with many across campus

Other diversity-focused programs/lectures do address aspects of cultural competence, but are not part of a formal training.

The website URL where information about the cultural competence trainings is available:

Assessing Diversity and Equity

Responsible Party

Bridget Newell

Associate Provost for Diversity
Provost's Office

Criteria

Institution assesses diversity and equity on campus and uses the results to guide policy, programs, and initiatives. The assessment(s) address one or more of the following areas:

- 1. **Campus climate**, e.g. through a survey or series of surveys to gather information about the attitudes, perceptions and experiences of campus stakeholders and underrepresented groups
- 2. **Student diversity and educational equity**, e.g. through analysis of institutional data on diversity and equity by program and level, comparisons between graduation and retention rates for diverse groups, and comparisons of student diversity to the diversity of the communities being served by the institution
- 3. **Employee diversity and employment equity**, e.g. through analysis of institutional data on diversity and equity by job level and classification, and comparisons between broad workforce diversity, faculty diversity, management diversity and the diversity of the communities being served by the institution
- 4. **Governance and public engagement**, e.g. by assessing access to and participation in governance on the part of underrepresented groups and women, the centrality of diversity and equity in planning and mission statements, and diversity and equity in public engagement efforts

"---" indicates that no data was submitted for this field

Has the institution assessed diversity and equity in terms of campus climate?:

Yes

A brief description of the campus climate assessment(s):

- October 2010: Campus Climate Task Force Created
- September 7, 2011 Campus Climate Report shared with campus
- --Identified the following as issues: student intellectual engagement outside of the classroom, student social life (including role of Greek letter organizations), student alcohol consumption, dynamics of male and female student experiences, sexual assault, student and campus diversity and inclusion
- --Included more than 75 tactical suggestions
- November 16, 2011 Campus Climate update from the president identified committees to address the issues: The President's Council on Diversity (new), The Coalition for Sexual Misconduct Prevention and Response (new), The Committee on Instruction's Ad Hoc Committee on Academic Student Engagement (new), The Committee for a Better Fraternity and Sorority Community (already existed), The Committee on Student Leadership Development (already existed), The Committee for Strengthening Our Residential Community (already existed)
- December 18, 2013 Campus Climate update clarified progress to date to campus.

Results and tactical suggestions have been guiding campus decisions over the past three years. Some highlights related to diversity
include:
New Hires related to climate report:
Assistant Dean of Students for Diversity, Student Affairs (March 2012)
Associate Provost for Diversity (September 20120
Associate Dean of Admissions with a focus on multicultural students (August 2013)
Multicultural Recruiter (August 2013)
Director of the Office of Disability Resources (January 2014
Results shaped content and scope of 2014-2019 Diversity Plan and accompanying metrics
March 2013: Diverse Learning Environments Survey disseminated to representative group of sophomores and juniors for baseline
information; currently reviewing potential to use one survey that addresses students, staff, and faculty climate issues.
Staff and Faculty Hiring Guides were developed to include best practices for diversifying the applicant pool and addressing implicit bias
and other potential barriers to recruiting, hiring, and retaining a high quality, diverse faculty and staff. Training is associated with the use
of the guide.
Concerted effort to review policies and practices with a critical lens for diversity and equity is underway. This is an ongoing-long term process.
Has the institution assessed student diversity and educational equity?:
Yes
A brief description of the student diversity and educational equity assessment(s):
Yes, as part of the campus climate report, and to some extent a degree completion task force addressed this.
Has the institution assessed employee diversity and employment equity?:
No
A brief description of the employee diversity and employment equity assessment(s):

Has the institution assessed diversity and equity in terms of governance and public engagement?:
No
A brief description of the governance and public engagement assessment(s):
The website URL where information about the assessment(s) is available:

Support for Underrepresented Groups

Responsible Party

Bridget Newell

Associate Provost for Diversity Provost's Office

Criteria

Part 1

Institution has mentoring, counseling, peer support, academic support, or other programs in place to support underrepresented groups on campus.

This credit excludes programs to help build a diverse faculty throughout higher education, which are covered in *PA 7: Support for Future Faculty Diversity*.

Part 2

Institution has a discrimination response policy, program and/or team (or the equivalent) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime.

"---" indicates that no data was submitted for this field

Does the institution have mentoring, counseling, peer support, academic support, or other programs to support underrepresented groups on campus?:

Yes

A brief description of the programs sponsored by the institution to support underrepresented groups:

Posse Scholars: Scholars who come to Bucknell via the Posse Program are assigned to a faculty or staff mentor who meets regularly with them during the first two years at Bucknell, and usually throughout students' whole academic career at Bucknell. Bucknell now receives scholars from Washington DC, Boston, and Los Angelos

The TEAM Program (Together Everyone Achieves More): a year -ong program engages intellectually talented student in the life of the University while fostering an affinity to the University. Students from underrepresented groups entering Bucknell as first-year or transfer students in the fall are invited to participate. TEAM partners first-year student scholars with an upper class mentor to establish a supportive and guiding relationship. Mentors receive extensive training and must be committed to developing a meaning relationship with their scholars. Those who participate in TEAM attend an exclusive pre-orientation program, RAMP up! (Ready, Aware, Motivated, and Prepared) focused on study skills, campus resources, and connecting with faculty and staff members.

BCCS: This summer program focused on students from underrepresented groups who have just completed their first year at one of 5 community colleges, pairs students with faculty or staff mentors who help them navigate their summer and consider futures at Bucknell or other 4-year institutions. Mentors remained connected to the scholars throughout their second year at a community college, and at Bucknell if the student is accepted and transfers to Bucknell.

Engineering Success Aliance: An academic success program that supports students from under-resourced high schools who have the

skills to be successful in Bucknell's engineering program. The Director of the ESA serves as a mentor to students.

The website URL where more information about the support programs for underrepresented groups is available:

http://www.bucknell.edu/TEAMmentorProgram

Does the institution have a discrimination response policy and/or team (or the equivalent) to respond to and support those who have experienced or witnessed a bias incident, act of discrimination or hate crime?:

Yes

A brief description of the institution's discrimination response policy, program and/or team:

Since the spring of 2014 a Bucknell team (Student, Faculty, Director of the LGBTQ Community Center, Associate Provost for Diversity) has met to review and revise/strengthen Bucknell's Bias Related Harassment Policy. The focus is on ensuring that the revised policy (Bias Policy) is inclusive and clear, provides support and information for targets, and is tied to an online reporting system. Tied to this is training for Bias Response Team Members and awareness-raising related to the new/developed policy.

The website URL where more information about the institution's discrimination response policy, program and/or team is available:

http://www.bucknell.edu/StudentHandbook.xml-

Does the institution offer housing options to accommodate the special needs of transgender and transitioning students?:

Yes

Does the institution produce a publicly accessible inventory of gender neutral bathrooms on campus?:

No

Support for Future Faculty Diversity

Responsible Party

Bridget Newell

Associate Provost for Diversity
Provost's Office

Criteria

Institution administers and/or participates in a program or programs to help build a diverse faculty throughout higher education.

Such programs could take any of the following forms:

- Teaching fellowships or other programs to support terminal degree students from underrepresented groups in gaining teaching experience. (The terminal degree students may be enrolled at another institution.)
- Mentoring, financial, and/or other support programs to prepare and encourage undergraduate or other non-terminal degree students from underrepresented groups to pursue further education and careers as faculty members.
- Mentoring, financial, and/or other support programs for doctoral and post-doctoral students from underrepresented groups.

"---" indicates that no data was submitted for this field

Does the institution administer and/or participate in a program or programs to help build a diverse faculty that meet the criteria for this credit?:

Yes

A brief description of the institution's programs that help increase the diversity of higher education faculty:

• Member of Consortium for Faculty Diversity in Liberal Arts Colleges: A new member of this consortium, Bucknell is focused on offering postdoc opportunities; our first postings for such positions will be fall 2014. Consortium website:

http://www.gettysburg.edu/about/offices/provost/cfd/

• Member of Liberal Arts Diversity Officers' Creating Connections Consortium/C3 Initiative. Part of a Mellon Grant, written collaboratively by Middlebury, Williams, and Connecticut College. the C3 initiative includes a post doc program with Berkeley and Columbia. As a member of the Liberal Arts Diversity Officers group (LADO), Bucknell has participated in outreach workshops to graduate students, which includes publicizing open positions and outreach to Berkeley's and Columbia's graduate students from underrepresented groups. C3 overview available here:

http://www.middlebury.edu/media/view/440374/original/c3_strategy.pdf

The website URL where more information about the faculty diversity program(s) is available :									
rp://www.gettysburg.edu/about/offices/provost/cfd/									

Responsible Party

Andrea Leithner Stauffer

Director, Financial Aid Financial Aid

Criteria

Part 1

Institution has policies and programs in place to make it accessible and affordable to low-income students and/or to support non-traditional students. Such policies and programs may include, but are not limited to, the following:

- · Policies and programs to minimize the cost of attendance for low-income students
- Programs to equip the institution's faculty and staff to better serve students from low-income backgrounds
- Programs to prepare students from low-income backgrounds for higher education (e.g. U.S. federal TRIO programs)
- · Scholarships provided specifically for low-income students
- Programs to guide parents of low-income students through the higher education experience
- Targeted outreach to recruit students from low-income backgrounds
- Scholarships provided specifically for part-time students
- An on-site child care facility, a partnership with a local facility, and/or subsidies or financial support to help meet the child care needs of students

Part 2

Institution is accessible and affordable to low-income students as demonstrated by one or more of the following indicators:

- A. The percentage of entering students that are low-income
- B. The graduation/success rate for low-income students
- C. The percentage of student financial need met, on average
- D. The percentage of students graduating with no interest-bearing student loan debt

"---" indicates that no data was submitted for this field

Does the institution have policies and programs in place to make it accessible and affordable to low-income students?: Yes

A brief description of any policies and programs to minimize the cost of attendance for low-income students:

At Bucknell, we welcome financial aid applications from any students when they apply for admission, but we do not have specific financial aid funding for students who come from low-income families. We do spend time working with the students, parents and guidance counselors to educate them on our financial aid process, let them know what aid is available for those who qualify, and what they have to do in order to apply. We try to give them as much information as possible and advise them that we are here if they have further questions or need guidance during the application process. A brief description of any programs to equip the institution's faculty and staff to better serve students from low-income backgrounds: none A brief description of any programs to prepare students from low-income backgrounds for higher education: none A brief description of the institution's scholarships for low-income students: none A brief description of any programs to guide parents of low-income students through the higher education experience: none A brief description of any targeted outreach to recruit students from low-income backgrounds: none A brief description of other admissions policies or programs to make the institution accessible and affordable to low-income students: none A brief description of other financial aid policies or programs to make the institution accessible and affordable to low-income students: none

A brief description of other policies and programs to make the institution accessible and affordable to low-income

students not covered above:

None

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No

A brief description of any scholarships provided specifically for part-time students:

A brief description of any onsite child care facilities, partnerships with local facilities, and/or subsidies or financial support to help meet the child care needs of students:

--

A brief description of other policies and programs to support non-traditional students:

Does the institution wish to pursue Part 2 of this credit (accessibility and affordability indicators)?:

Yes

Indicators that the institution is accessible and affordable to low-income students::

	Percentage (0-100)
The percentage of entering students that are low-income	9
The graduation/success rate for low-income students	89
The percentage of student financial need met, on average	90.91
The percentage of students graduating with no interest-bearing student loan debt	45

The percentage of students that participate in or directly benefit from the institution's policies and programs to support low-income and non-traditional students:

The website URL where information about the institution's affordability and access programs is available:

Health, Wellbeing & Work

This subcategory seeks to recognize institutions that have incorporated sustainability into their human resources programs and policies. An institution's people define its character and capacity to perform; and so, an institution's achievements can only be as strong as its community. An institution can bolster the strength of its community by making fair and responsible investments in its human capital. Such investments include offering benefits, wages, and other assistance that serve to respectfully and ethically compensate workers and acting to protect and positively affect the health, safety and wellbeing of the campus community. Investment in human resources is integral to the achievement of a healthy and sustainable balance between human capital, natural capital, and financial capital.

Credit
Employee Compensation
Assessing Employee Satisfaction
Wellness Program
Workplace Health and Safety

Employee Compensation

Responsible Party

Marcia Hoffman

Executive Director Human Resources
Human Resources

Criteria

Part 1

Institution's employees and/or the employees of its on-site contractors are covered by sustainable compensation standards, guidelines, or policies and/or collective bargaining agreements.

A sustainable compensation (or "living wage") standard, guideline or policy is one that addresses wages and benefits in terms of the ability of employees to meet basic needs. For example, a sustainable compensation policy may index hourly wages to a poverty guideline or to local cost-of-living indicators. A labor market survey, salary survey or similar assessment may be used in conjunction with a basic needs/cost-of-living approach, but is not sufficient on its own to count as a sustainable compensation policy.

Part 2

Institution's employees and/or the employees of its on-site contractors receive sustainable compensation.

To earn points for Part 2 of this credit, an institution must assess employee compensation against one or more of the following:

- 1. A sustainable compensation standard developed or adopted by a committee with multi-stakeholder representation (i.e. its membership includes faculty, staff, and students and may include Human Resources administrators or other parties). The standard need not be formally adopted by the institution.
- 2. A sustainable compensation standard that is in use in the institution's locality. The standard may be formal (e.g. a "living wage" ordinance covering public employees) or informal (e.g. a standard adopted by a local, regional or national campaign).
- 3. An appropriate poverty guideline, threshold or low-income cut-off for a family of four.

For institutions that elect to assess compensation against a poverty guideline, threshold or low-income cut-off, sustainable compensation is defined as wages equivalent to 120 percent of the poverty guideline for a family of four. An institution may offset up to 20 percent of the wage criteria with employer-paid benefits that address basic needs (e.g. healthcare and retirement contributions).

Both parts of this credit are based on the total number of employees working on campus as part of regular and ongoing campus operations, which includes:

- Staff and faculty, i.e. all regular full-time, regular part-time and temporary (or non-regular) employees, including adjunct faculty and
 graduate student employees (e.g. teaching and research assistants). Institutions may choose to include or omit undergraduate student
 workers.
- Employees of contractors that work on-site as part of regular and ongoing campus operations. Such contractors may include, but are not limited to, providers of dining/catering, cleaning/janitorial, maintenance, groundskeeping, transportation, and retail services.

Construction and demolition crews and other temporary contracted employees may be excluded.

"---" indicates that no data was submitted for this field

Number of employees:

1,203

Number of staff and faculty covered by sustainable compensation standards, guidelines, or policies; and/or collective bargaining agreements:

1,203

Does the institution have employees of contractors working on-site as part of regular and ongoing campus operations?:

Yes

Number of employees of contractors working on campus:

226

Number of employees of contractors covered by sustainable compensation standards, guidelines, or policies and/or collective bargaining agreements:

226

A brief description of the sustainable compensation standards, guidelines, or policies; and/or collective bargaining agreements covering staff, faculty and/or employees of contractors:

In 2002, Bucknell University instituted a wage floor of \$9.00/hour (\$18,720 annually based on a 40-hour work week) for non-exempt staff who had satisfactorily met the expectations of their positions for four or more years, and in subsequent years, the wage floor has been increased based on the Poverty Guidelines issued by the U.S. Department of Health and Human Services, which assures a consistent, reliable, and credible approach. Many other organizations use these Guidelines to determine eligibility for certain programs including Head Start, Low-Income Home Energy Assistance Program, Food Stamp Program, National School Lunch Program, Job Corps, and Youth Activities under the Workforce Investment Act, to name a few.

Human Resources determines the hourly wage floor rate each year based on the poverty guidelines for a family of four with one wage earner, and shares with the Director of Business Services, who is responsible for oversight of various business and auxiliary service units of the University. For 2014-15, the wage floor rate is \$11.47/hour. Over the course of the first four years of employment, a wage floor adjustment will be implemented for the affected staff members. Generally, staff members whose hourly wage rate is below the wage floor will receive an adjustment of \$0.50/hour each year. While the administration of the wage floor varies for individual groups, all abide to the 4 year guideline.

Does the institution wish to pursue Part 2 of this credit (assessing employee compensation)?:

Yes

Number of staff and faculty that receive sustainable compensation:

Number of employees of contractors that receive sustainable compensation:

226

A brief description of the standard(s) against which compensation was assessed:

In 2002, Bucknell University instituted a wage floor of \$9.00/hour (\$18,720 annually based on a 40-hour work week) for non-exempt staff who had satisfactorily met the expectations of their positions for four or more years, and in subsequent years, the wage floor has been increased based on the Poverty Guidelines issued by the U.S. Department of Health and Human Services, which assures a consistent, reliable, and credible approach. Many other organizations use these Guidelines to determine eligibility for certain programs including Head Start, Low-Income Home Energy Assistance Program, Food Stamp Program, National School Lunch Program, Job Corps, and Youth Activities under the Workforce Investment Act. to name a few.

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, full-time employees:

Human Resources determines the hourly wage floor rate each year based on the poverty guidelines for a family of four with one wage earner. Because Bucknell provides a generous benefits package, including health care coverage (with cost-share based on salary), the calculated wage floor should provide an adequate standard of living for Bucknell staff members. For 2014-15, the wage floor rate is \$11.47/hour. Each year, Human Resources, in consultation with Facilities management, implements a wage floor adjustment for those members of the support staff whose compensation is below the wage floor rate. Generally, staff members whose hourly wage rate is below the wage floor will receive an adjustment of \$0.50/hour each year. Wage floor adjustments are funded through the staff market adjustment budget established each year.

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid regular, part-time employees:

Human Resources determines the hourly wage floor rate each year based on the poverty guidelines for a family of four with one wage earner. Because Bucknell provides a generous benefits package, including health care coverage (with cost-share based on salary), the calculated wage floor should provide an adequate standard of living for Bucknell staff members. For 2014-15, the wage floor rate is \$11.47/hour. Each year, Human Resources, in consultation with Facilities management, implements a wage floor adjustment for those members of the support staff whose compensation is below the wage floor rate. Generally, staff members whose hourly wage rate is below the wage floor will receive an adjustment of \$0.50/hour each year. Wage floor adjustments are funded through the staff market adjustment budget established each year.

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary (non-regular) staff:

All adhere to at the very least the state minimum wage. And staff are reviewed on an annual basis, if here for a year or more, are eligible for a merit adjustment.

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid temporary

(non-regular, adjunct or contingent) faculty:

All adjunct and lecturer faculty members are at or above the sustainable compensation.

A brief description of the compensation (wages and benefits) provided to the institution's lowest paid student employees (graduate and/or undergraduate, as applicable):

Student wages use the following guidelines to determine appropriate wage rates for student employees, which are applicable to all students:

Category 1 - \$7.25-7.75 - Requires basic skills that can be readily learned on-the-job. Work is fairly routine and usually supervised by a student or staff manager. Examples: Stuffing envelopes; shelving books; filing;

monitoring equipment; simple data entry.

Category 2 - \$7.50 - 8.50 - Requires moderate interpersonal, customer service, and/or technical skills that require training beyond what can be learned only on-the-job. Works with occasional direct supervision. Examples: Working at customer service sites; reception duties including answering the phone, making

appointments; basic word processing & spreadsheet work; query into a specialized database.

Category 3 - \$7.75 - 8.75 - Requires highly specialized knowledge and skills, and functions in an independent manner. Regularly required to exercise discretion and to demonstrate problem- solving skills without direct supervision. Examples: Computer troubleshooting; data entry into a specialized database; technical media services.

*In addition to the above rates, annual increases of \$.25/hour may be given in all categories.

The local legal minimum hourly wage for regular employees:

7.25 US/Canadian \$

Does the institution have an on-site child care facility, partner with a local facility, and/or provide subsidies or financial support to help meet the child care needs of faculty and staff?:

Yes

Does the institution offer a socially responsible investment option for retirement plans?:

Yes

The website URL where information about the institution's sustainable compensation policies and practices is available:

Responsible Party

Marcia Hoffman

Executive Director Human Resources
Human Resources

Criteria

Institution conducts a survey or other evaluation that allows for anonymous feedback to measure employee satisfaction and engagement. The survey or equivalent may be conducted institution-wide or may be done by individual departments or divisions. The evaluation addresses (but is not limited to) the following areas:

- · Job satisfaction
- · Learning and advancement opportunities
- Work culture and work/life balance

The institution has a mechanism in place to address issues raised by the evaluation.

Not listed in 2012 Ranked #28 in 2011 http://www.bestplacestoworkinpa.com/index.php?option=com_content&task=view&id=53 Ranked #39 in 2010 http://www.bestplacestoworkinpa.com/index.php?option=com_content&task=view&id=52

"---" indicates that no data was submitted for this field

Has the institution conducted an employee satisfaction and engagement survey or other evaluation that meets the criteria for this credit?:

Yes

Ranked #22 in 2009

The percentage of employees (staff and faculty) assessed, directly or by representative sample:

16

A brief description of the institution's methodology for evaluating employee satisfaction and engagement:

Bucknell University participated in the Best Places to Work in Pa program in 2009, 2010, 2011, and 2012. Each year, the BPTW program sent the survey to 350 randomly selected faculty and staff.

A brief description of the mechanism(s) by which the institution addresses issues raised by the evaluation (including examples from the previous three years):

BPTW survey resuluts were shared with the University's senior leaders (OMG), division heads, and the University's personnel committees for review and discussion. These deliberations have resulted in the addition of an employer-sponsored dental program, more transparent presentations of the University's financials, and a more robust wellness program for faculty and staff.

The year the employee satisfaction and engagement evaluation was last administered:

2.012

The website URL where information about the institution's employee satisfaction and engagement assessment is available:

https://my.bucknell.edu/x55666.html

Wellness Program

Responsible Party

Marcia Hoffman

Executive Director Human Resources
Human Resources

Criteria

Institution has a wellness and/or employee assistance program that makes available counseling, referral, and wellbeing services to all members of any of the following groups:

- Students
- Staff
- Faculty

Submission Note:

The Be Smart, Be Well, Be YOU wellness initiative and the EAP are available to faculty and staff. Students have a variety of similar services available to them in the Dean of Students Division, including Psychological Services, and Bucknell Student Health.

"---" indicates that no data was submitted for this field

Does the institution make counseling, referral, and wellbeing services available to all members of the following groups?:

	Yes or No
Students	Yes
Staff	Yes
Faculty	Yes

A brief description of the institution's wellness and/or employee assistance program(s):

Description of the Wellness Program:

http://www.bucknell.edu/wellness

Bucknell. The program was formally launched by President Bravman in the fall of 2012 with the goal of creating a culture of wellness, developing tools and systems to support healthy behaviors and lifestyles, managing rising health care costs through education, and promoting holistic wellness.

The comprehensive wellness initiative educates, motivates, and empowers Bucknell faculty, staff, and their dependents to be actively engaged in improving their quality of life. The wellness initiative seeks to share information, strategies, and resources to support a healthy campus culture which positively impacts individual faculty and staff members, as well as the campus, their families, and the communities in which they live.

Description of the EAP:

www.mylifevalues.com

The University provides free and confidential access to the Aetna Resources for Living Employee Assistance Program to faculty, staff and members of their households. EAP services include social development; stress management; anxiety and depression; legal and financial matters; worklife balance; relationships and marriage; child and elder care; education planning; substance abuse; and more. The EAP offers unlimited telephonic contacts, up to 6 face-to-faced diagnostic visits, and management referrals.

The website URL where information about the institution's wellness program(s) is available:

http://www.bucknell.edu/wellness

Workplace Health and Safety

Responsible Party

Marcia Hoffman

Executive Director Human Resources
Human Resources

Criteria

Part 1

Institution has reduced its total number of reportable workplace injuries and occupational disease cases per full-time equivalent (FTE) employee compared to a baseline.

Part 2

Institution has fewer than 5 reportable workplace injuries and occupational disease cases annually per 100 full-time equivalent (FTE) employees.

This credit includes employees of contractors working on-site for whom the institution is liable for workplace safety, for example workers for whom the institution is mandated to report injuries and disease cases by a health and safety authority such as the U.S. Occupational Health and Safety Administration (OSHA) or the Canadian Center for Occupational Health and Safety (CCOHS). Injuries and disease cases include OSHA/CCOHS-reportable fatal and non-fatal injuries (or the equivalent) arising out of or in the course of work and cases of diseases arising from a work-related injury or the work situation or activity (e.g. exposure to harmful chemicals, stress, ergonomic issues). See *Sampling and Data Standards*, below, for further guidance on reporting injuries and disease cases.

"---" indicates that no data was submitted for this field

Please enter data in the table below::

	Performance Year	Baseline Year
Number of reportable workplace injuries and occupational disease cases	15	28
Full-time equivalent of employees	1,308.70	1,162

Start and end dates of the performance year and baseline year (or three-year periods):

Start Date End Date

Performance Year	Jan. 1, 2013	Dec. 31, 2013
Baseline Year	Jan. 1, 2009	Dec. 31, 2009

A brief description of when and why the workplace health and safety baseline was adopted:

A workplace safety committee has been in place for several years, including an EH&S Staff of 3 Full time Employees.

A brief description of the institution's workplace health and safety initiatives:

■A comprehensive Environmental Safety and Health program that includes key initiatives such as chemical hygiene plan, Lab Safety, Radiation Safety and several other OSHA, EPA programs. ■

The website URL where information about the institution's workplace health and safety initiatives is available:

Investment

This subcategory seeks to recognize institutions that make investment decisions that promote sustainability. Most institutions invest some of their assets in order to generate income. Together, colleges and universities invest hundreds of billions of dollars. Schools with transparent and democratic investment processes promote accountability and engagement by the campus and community. Furthermore, institutions can support sustainability by investing in companies and funds that, in addition to providing a strong rate of return, are committed to social and environmental responsibility. Investing in these industries also supports the development of sustainable products and services. Finally, campuses can engage with the businesses in which they are invested in order to promote sustainable practices.

Throughout this subcategory, the term "sustainable investment" is inclusive of socially responsible, environmentally responsible, ethical, impact, and mission-related investment.

Credit
Committee on Investor Responsibility
Sustainable Investment
Investment Disclosure

Committee on Investor Responsibility

Responsible Party

John Luthi

Director of Investments
Investments Office

Criteria

Institution has a formally established and active committee on investor responsibility (CIR) or similar body that makes recommendations to fund decision-makers on socially and environmentally responsible investment opportunities across asset classes, including proxy voting. The body has multi-stakeholder representation, which means its membership includes faculty, staff, and students and may include alumni, trustees, and/or other parties.

Institutions for which investments are handled by the university system and/or a separate foundation of the institution should report on the investment policies and activities of those entities.

A general committee that oversees the institution's investments does not count for this credit unless social and environmental responsibility is an explicit part of its mission and/or agenda.

This credit applies to institutions with endowments of US \$1 million or larger. Institutions with endowments totaling less than US \$1 million may choose to omit this credit.

"---" indicates that no data was submitted for this field

Does the institution have a formally established and active committee on investor responsibility (CIR) or similar body that has multi-stakeholder representation and otherwise meets the criteria for this credit?:

No

The charter or mission statement of the CIR or other body which reflects social and environmental concerns or a brief description of how the CIR is tasked to address social and environmental concerns:

Members of the CIR, including affiliations and role (e.g. student, faculty, alumni):

Examples of CIR actions during the previous three years:

The website URL where information about the CIR is available:

Responsible Party

John Luthi

Director of Investments
Investments Office

Criteria

There are two possible approaches to this credit; institutions may pursue one or both. Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

Option 1: Positive Sustainability Investment

Institution invests in one or more of the following:

- Sustainable industries (e.g. renewable energy or sustainable forestry). This may include any investment directly in an entire industry sector as well as holdings of companies whose entire business is sustainable (e.g. a manufacturer of wind turbines).
- Businesses *selected for* exemplary sustainability performance (e.g. using criteria specified in a sustainable investment policy). This includes investments made, at least in in part, because of a company's social or environmental performance. Existing stock in a company that happens to have socially or environmentally responsible practices should not be included unless the investment decision was based, at least in part, on the company's sustainability performance.
- Sustainability investment funds (e.g. a renewable energy or impact investment fund). This may include any fund with a mission of investing in a sustainable sector or industry (or multiple sectors), as well as any fund that is focused on purchasing bonds with sustainable goals.
- **Community development financial institutions** (CDFI) or the equivalent (including funds that invest primarily in CDFIs or the equivalent).
- Socially responsible mutual funds with positive screens (or the equivalent). Investment in a socially responsible fund with only negative screens (i.e. one that excludes egregious offenders or certain industries, such as tobacco or weapons manufacturing) does not count for Option 1.
- Green revolving loan funds that are funded from the endowment

Option 2: Investor Engagement

Institution has policies and/or practices that meet one or more of the following criteria:

- Has a publicly available sustainable investment policy (e.g. to consider the social and/or environmental impacts of investment decisions in addition to financial considerations)
- Uses its sustainable investment policy to select and guide investment managers
- Has engaged in proxy voting to promote sustainability, either by its CIR or other committee or through the use of guidelines, during the previous three years
- Has filed or co-filed one or more shareholder resolutions that address sustainability or submitted one or more letters about social or
 environmental responsibility to a company in which it holds investments, during the previous three years

- Has a publicly available investment policy with negative screens, for example to prohibit investment in an industry (e.g. tobacco or weapons manufacturing) or participate in a divestment effort (e.g. targeting fossil fuel production or human rights violations)
- Engages in policy advocacy by participating in investor networks (e.g. Principles for Responsible Investment, Investor Network on Climate Risk, Interfaith Center on Corporate Responsibility) and/or engages in inter-organizational collaborations to share best practices

"---" indicates that no data was submitted for this field

Total value of the investment pool:

725,000,000 US/Canadian \$

Value of holdings in each of the following categories::

	Value of Holdings
Sustainable industries (e.g. renewable energy or sustainable forestry)	0 US/Canadian \$
Businesses selected for exemplary sustainability performance (e.g. using criteria specified in a sustainable investment policy)	0 US/Canadian \$
Sustainability investment funds (e.g. a renewable energy or impact investment fund)	13,000,000 US/Canadian \$
Community development financial institutions (CDFIs) or the equivalent	0 US/Canadian \$
Socially responsible mutual funds with positive screens (or the equivalent)	0 US/Canadian \$
Green revolving loan funds that are funded from the endowment	0 US/Canadian \$

A brief description of the companies, funds, and/or institutions referenced above:

A renewable energy fund investing in wind, solar, and biomass projects.

A sustainable forestry and a sustainable farmland fund investing in the US, Australia, New Zealand, and South America.

Does the institution have a publicly available sustainable investment policy?:

Yes

A copy of the sustainable investment policy: Doc1.docx The sustainable investment policy: Excerpt from Investment Policy: "Consistent with the University's strategic Sustainability Initiative, the Investment Committee and Investment Office will evaluate prospective and existing investments with a combination of achieving investment objectives, preserving intergenerational equity, compliance with applicable state and federal codes, and evaluation of environmental, social, and governance factors on a case-by-case basis." Does the institution use its sustainable investment policy to select and guide investment managers?: Yes A brief description of how the policy is applied, including recent examples: Existing investment funds in the endowment are monitored using a proprietary set of ESG questions. We utilize the expertise and resources of an Investment Consultant to assist with due diligence on new investment funds. Our Investment Consultant assigns ESG ratings that represents their view on the extent environmental, social, and corporate governance (ESG) and active ownership practices (voting and engagement) are integrated into the manager's investment process and decision making across all asset classes. During discussions with managers about ESG integration, they assess the use of ESG information to generate outperformance. Four factors are assessed to derive an overall ESG rating: idea generation, portfolio construction, implementation, and firmwide commitment. The consultant utilizes a 4 point ESG rating scale, these ratings are incorporated into our overall due diligence on new investment funds / managers. Does the institution's sustainable investment policy include negative screens?: No A brief description of the negative screens and how they have been implemented: Approximate percentage of the endowment that the negative screens apply to: Has the institution engaged in proxy voting, either by its CIR or other committee or through the use of guidelines, to promote sustainability during the previous three years?: No

A brief description of how managers are adhering to proxy voting guidelines:

A copy of the proxy voting guidelines or proxy record:

Has the institution filed or co-filed one or more shareholder resolutions that address sustainability or submitted one or more letters about social or environmental responsibility to a company in which it holds investments during the previous three years?:

No

Examples of how the institution has engaged with corporations in its portfolio about sustainability issues during the previous three years:

Does the institution engage in policy advocacy by participating in investor networks and/or engaging in inter-organizational collaborations to share best practices?:

Yes

A brief description of the investor networks and/or collaborations:

Institutional Investor roundtable, NMS Management Forums

The website URL where information about the institution's sustainable investment efforts is available:

Responsible Party

John Luthi

Director of Investments
Investments Office

Criteria

Institution makes a snapshot of its investment holdings available to the public, including the amount invested in each fund and/or company and proxy voting records. The snapshot of holdings is updated at least once per year.

Institutions for which investments are handled by the university system, a separate foundation of the institution and/or a management company contracted by the institution should report on the combined activities of those entities.

"---" indicates that no data was submitted for this field

Does the institution make a snapshot of its investment holdings available to the public?:

No

The percentage of the total investment pool included in the snapshot of investment holdings:

2

A copy of the investment holdings snapshot:

The website URL where the holdings snapshot is publicly available:

http://www.bucknell.edu/Documents/Communication/Spring2014EndowmentReport.pdf

Innovation

These credits recognize institutions that are seeking innovative solutions to sustainability challenges and demonstrating sustainability leadership in ways that are not otherwise captured by STARS.

Credit	
Innovation 1	
Innovation 2	
Innovation 3	
Innovation 4	

Responsible Party

Dina El-Mogazi

Director, Sustainable Design Program
Center for Sustainability and the Environment

Criteria

- 1. Innovation credits are reserved for new, extraordinary, unique, ground-breaking, or uncommon outcomes, policies, and practices that greatly exceed the highest criterion of an existing STARS credit or are not covered by an existing STARS credit.
- 2. In general, innovation credits should have roughly similar impacts or be on the same scale as other STARS credits.
- 3. Outcomes, policies, and practices that are innovative for the institution's region or institution type are eligible for innovation credits.
- 4. The innovative practice, policy, program, or outcome must have occurred within the three years prior to the anticipated date of submission.
- 5. The innovative practice or program has to be something that the institution has already done; planned activities do not count.
- 6. The innovative practice or program should originate from an area within the defined institutional boundary.
- 7. An institution can only claim a particular activity as an innovation credit once. When re-submitting for a STARS rating, an innovation credit that the institution submitted previously cannot be re-submitted. An institution that has made significant advancements to a project or program that was previously submitted as an innovation may resubmit based on those advancements if the project or program is still considered innovative.
- 8. Practices, policies, and programs that were once considered innovative but are now widely adopted (e.g. being the first institution to enact a policy 20 years ago that is now common) may not be claimed as innovation credits.
- 9. Multiple activities or practices whose sum is innovative can be considered for an innovation credit as long as those activities or practices are related. For example, three innovative waste reduction programs in research laboratories could be listed together under a single innovation credit for Greening Laboratories. Listing a series of unrelated accomplishments or events under a single innovation credit is not accepted.
- 10. While the practices that led to receiving an award may be appropriate for an innovation credit, winning awards and/or high sustainability rankings in other assessments is not, in and of itself, grounds for an innovation credit. When the innovation is part of a partnership, the summary provided must clearly describe the institution's role in the innovation.

To help ensure that the policy, practice, program, or outcome that the institution is claiming for an innovation credit is truly innovative, institutions must submit a letter of affirmation from an individual with relevant expertise in the associated content area. The letter should affirm how the innovation meets the criteria outlined above.

For example, if an institution claims an innovation credit for water use reduction, the institution might solicit a letter from a hydrologist or a water expert from another campus or organization to verify that the strategy is innovative. An innovation may be affirmed internally by campus personnel who are independent of the policy, practice, program, or outcome. Please note that it is not required that the individual be employed in the higher education sector to submit a letter of verification.

The letter should be specific to a single innovation credit. If an institution is claiming three innovation credits, it would solicit and submit three separate letters, with each letter speaking to the specific innovation credit it addresses.

Title or keywords related to the innovative policy, practice, program, or outcome:

Miller Run Restoration Project

A brief description of the innovative policy, practice, program, or outcome :

Since 2010 staff, faculty, and students associated with the Bucknell University Environmental Center, Bucknell Facilities, and the U.S. Fish and Wildlife Service have collaborated to restore the headwaters of Bucknell's campus stream, Miller Run.

A brief description of any positive measurable outcomes associated with the innovation (if not reported above):

Upon completion of the project (projected spring 2015) the restored stream is expected to accommodate greater biodiversity, contribute less storm water runoff to the Susquehanna River, and facilitate greater groundwater recharge through the presence of newly constructed riparian wetlands. Measurements of these and other indicators are underway and ongoing by faculty and students associated with the project.

A letter of affirmation from an individual with relevant expertise:

Ltr of Rec-BU STARS.pdf

Which of the following STARS subcategories does the innovation most closely relate to? (Select all that apply up to a maximum of 5):

	Yes or No
Curriculum	
Research	Yes
Campus Engagement	Yes
Public Engagement	
Air & Climate	
Buildings	
Dining Services	
Energy	

Grounds	Yes
Purchasing	
Transportation	
Waste	
Water	Yes
Coordination, Planning & Governance	
Diversity & Affordability	
Health, Wellbeing & Work	
Investment	

Other topic(s) that the innovation relates to that are not listed above:

The website URL where information about the innovation is available :

 $http://www.departments.bucknell.edu/environmental_center/StreamRestorationCourse/Projects.html\\$

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