

# 2014-2015 Post-Secondary Nominee Presentation Form

## **ELIGIBILITY CERTIFICATIONS**

## **College or University Certifications**

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution's eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

- 1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 2. The college or university is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a compliance review.
- 3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
- 4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
- 5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
- 6. The college or university is in good standing with its regional or national accreditor.
- 7. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

## U.S. Department of Education Green Ribbon Schools 2014-2015

Public 4-Year Dublic 2-Year Private Non-Profit
Name of President/Chancellor: Dr. Gary Ransdell
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
Official College or University Name: Western Kentucky University
(As it should appear on an award)
College or University Street
Mailing Address: 1906 College Heights Blvd. Bowling Green, Kentucky, 42101
(If address is P.O. Box, also include street address.)
County: Warren IPEDS Number*: 157951
Telephone: 270-745-5394 Fax: 270-745-4492
Web site/URL: www.wku.edu E-mail: gary.ransdell@wku.edu

\*Integrated Postsecondary Education Data System

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



### Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

- 1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
- 2. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Kentucky Council on Postsecondary Education

Name of Nominating Authority: Mr. Robert L. King, President

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

furt d. En

Date: 1/29/2015

(Nominating Authority's Signature)

## SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your college or university is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

## **SUBMISSION**

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

> OMB Control Number: 1860-0509 Expiration Date: February 28, 2015

## **Public Burden Statement**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address. ED-GRS (2014-2015) Page 2 of 2

## Western Kentucky University Green Ribbon Award Proposal

#### **Executive Summary**

Western Kentucky University endeavors to reduce environmental impacts, improve wellness on campus, and provide first-rate environmental and sustainability education for Kentuckians and for our international and distance-learning students. We understand that doing so means reducing college costs, increasing completion rates, and ensuring that our graduates find degree-related employment. While diverse and multi-faceted, our initiatives, policies, and programs share a conviction and deep sense of purpose. We feel a moral obligation to our students, our local and global communities, and the planet to help mitigate environmental problems through sustainability initiatives. Our collective efforts encompass the three pillars of the Green Ribbon Schools designation.

WKU seeks to walk the walk, demonstrating sustainability best practices in the operations and services of our university. The Office of Sustainability was created and a Sustainability Coordinator hired in 2008. Since then, energy conservation and efficiency initiatives have reduced our energy use by 25%. In 2014, 15 tons of food waste was composted from the dining halls. WKU has been a Tree Campus USA since 2010, and in January 2015 the main campus became a certified arboretum. In 2009, we made a commitment to build to LEED standards and now have 3 LEED certified buildings and two pending certification. WKU has been included in the Princeton Review's *Guide to Green Colleges* every year since 2009, and this year earned AASHE's Silver Stars ranking. Our campus exemplifies sustainable practices from which we all can learn.

Similarly, our Wellness program has evolved to its current highly visible, proactive model. We believe that engaging in healthy practices with regard to food choices, mental health, exercise, and preventative care all promote a more active, aware, and motivated community that can live and learn more consciously and sustainably. In 2013, WKU launched a comprehensive wellness program for all benefitseligible faculty and staff. In July 2014, the National Safety Council accredited WKU as a Safe Community, only the fourth university, and 25<sup>th</sup> community to receive this accreditation in the nation. Recognizing that health and wellness related issues are among the most common barriers to student success, the WKU Health Services provides comprehensive health education and promotional programing, engaging students with participation incentives through the WKU WellU program.

Our primary strength lies in our mission as an educational instruction. WKU offers some of the most innovative and integrative educational programs in the country. We are home to the #1 ranked Gatton Academy and the only Honors College in the state, our STEM initiatives range from use of our campus as a living laboratory to exciting international experiences, such as Semester at Sea, which delves into climate change and sustainable places, as do many of our other study abroad offerings. Our undergraduate and graduate degrees and certificates address the science, social, economic, personal, and political aspects of environmental change and sustainability,

providing both disciplinary depth and interdisciplinary perspective-taking that pave the way for our students to get jobs and to make positive change in their communities.

## I. Introduction

Western Kentucky University (WKU) is a comprehensive, four-year university with the vision to be "a leading American university with international reach." As an educational institution first and foremost, WKU strives to create an atmosphere conducive to student engagement and creativity in a state that has a long history with environmental issues. Whether it concerns coal, natural gas, the damming of rivers, or groundwater contamination, WKU has played a central role in training its faculty, staff, and students to be informed and active citizens in the global effort to become greener and less consumptive of environmental resources. WKU exemplifies the notion that being green is primarily about the passion and vision of its campus community in striving to be innovative and outcome driven.

WKU is a leader in STEM education. It is home to the number one high school in America, the Gatton Academy of Science and Mathematics, as ranked by *Newsweek*, allowing Kentucky high school students to live and learn in a college setting while earning their high school diploma and focusing on research and engagement in STEM disciplines. In addition, WKU has the only independent Honors College within the state, which provides an opportunity for high achieving students to excel in their respective fields by taking more challenging courses and completing a thesis project. Together, these programs provide unique learning experiences for our students and expose them to cutting-edge environmental research and STEM curriculum experiences.

WKU is a leader in Kentucky, as well as nationally, in pioneering initiatives that address environmental issues at the local, state, national, and international levels. For example, WKU's Energy Policy has been adapted and adopted by the City of Bowling Green, Kentucky. The WKU "Conservation Vacation," an initiative introduced in 2009 to save energy over the winter break, has resulted in overall savings of more than 3 million kilowatt hours of energy, which equates to cost savings of approximately \$264,000 and mitigation of 2,191 metric tons of greenhouse gas emissions. Many of our curricular innovations in sustainability are also unique in Kentucky, while our international programs, such as the Climate Change Challenge study abroad trips, have pioneered advances in sustainable service learning and interdisciplinary environmental research experiences for students.

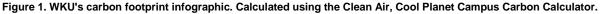
At WKU, we are unified in our diverse efforts to create a sustainable, practical, and educational approach toward environmental advocacy and engagement. Our efforts encompass the three pillars of reducing our environmental footprint, improving campus health and wellness, and effectively integrating environmental and sustainability themes within our educational and research programs. Below, we provide examples of myriad successes and efforts underway to establish WKU as an exemplary environmental educator, practitioner, and leader, ideally positioned to be a Green Ribbon School awardee.

# II. Green Ribbon School Pillars

## Pillar I. Reduced Environmental Impact and Costs

In 2008, WKU created the <u>Office of Sustainability</u> and hired a Sustainability Coordinator and put together a campus-wide fifteen-member Sustainability Committee that advises the President, in response to the growing awareness and need for environmental stewardship at the university level. WKU also created the *WKU Green Fund*, which provides a dedicated avenue by which fundraising for major sustainability initiatives can be achieved. Sustainability efforts at WKU aim to **reduce college costs**, **increase retention**, **increase employability**, **and foster civic and community skills**. The University continually strives to reduce its environmental and carbon footprint (Figure 1) through the implementation and evaluation of policies and programs in all areas of facilities management and campus services.





## National Level Activities

At the national level, WKU has been a member of the Association for the Advancement of Sustainability in Higher Education (AASHE) since 2008, and is a charter member of AASHE's Sustainability Tracking, Assessment, and Rating System (STARS). WKU earned STARS Bronze status in 2011 and Silver status in 2013. The American League of Bicyclists has identified WKU as a Bicycle Friendly University.

WKU has been included in the Princeton Review's *Guide to Green Colleges*, a designation awarded in partnership with the U.S. Green Building Council, every year since 2009. In 2010, WKU became a Tree Campus USA, a designation awarded by the Arbor Day Foundation. Each year, this designation is renewed, demonstrating a commitment to care for the campus' forest of more than 3,450 trees of more than 100 different species. WKU President Gary Ransdell sits on the university tree care committee and must personally approve every tree removal request. "Ransdell's Rule" states that for each tree removed, two will be planted. In January 2015, WKU's 97-acre main campus became a certified Arboretum.

The number of WKU activities and policies designed to reduce the University's environmental impacts and costs are too abundant for individual inclusion herein. Thus, a selection of environmentally relevant initiatives are outlined below, with more included in the <u>WKU Sustainability iBook</u>, "Big Red, Small Planet: Sustainability at WKU." The iBook, also available as a <u>PDF</u>, is an all-encompassing digital book created to communicate the successes, challenges, and goals related to environmental practices to WKU's community of faculty, staff, students, and visitors. By using electronic media, such communications are achieved without the environmental impacts associated with printing multiple copies of the 96-page document. The first edition of the book was developed in 2013, with the next version slated for development in the upcoming year, involving faculty, staff, and students from across the campus. The WKU Sustainability iBook is among only a few reports in this format by universities across the nation.

#### WKU Built Environment

WKU has been a member of the U.S. Green Building Council since 2008. Per our comprehensive and progressive Energy Policy adopted in 2009, we are committed to build and renovate to LEED standards in all building projects. When it comes to green buildings, WKU was an "early adopter," embracing the idea during the design phase of the new building for the College of Education & Behavioral Sciences, which is now LEED Gold certified. Since 2008, we have earned LEED silver or above on three new buildings, and we expect to earn LEED Silver certification for our newly renovated Downing Student Union. WKU is proud to have no fewer than nine LEED Accredited Professionals on staff. Some of our unique LEED building practices include tile floors made from recycled glass, furniture made of recycled plastic bottles, reflective roofing materials, and informational videos as digital art pieces used to educate building visitors of the green features present in some buildings.

#### **Energy Conservation**

Since 2009, with the adoption of a comprehensive and aggressive <u>University</u> <u>Energy Policy</u>, WKU has reduced energy use by 25% (kWh per square foot) through conservation and efficiency projects. These operational efforts, in combination with WKU's second successful Energy Savings Performance Contract (ESPC) in 2009 and in partnership with Johnson Controls, Inc., includes **\$9.7 million in energy reducing and facility improvements**. Thirty-eight existing buildings have been impacted with water and lighting improvements, encompassing 3.5 million square feet. The overall project has a 15-year payback period, with a guaranteed cost avoidance of more than \$1 million in utilities annually. These savings have not only eliminated the need for a utility budget increase in 7 years, but have been reinvested in energy efficient and conservation initiatives for continuous performance improvement. And, **the project has created or impacted more than 200 jobs** for the Commonwealth of Kentucky!

Energy conservation efforts are not limited to operations; the entire campus community is engaged in energy education and awareness activities. WKU has a webbased, WKU real-time energy use feedback program, allowing public viewing of energy use for nearly all campus buildings. Our program expresses energy used in meaningful units, including associated CO<sub>2</sub> emissions and dollars, and we are working to calculate this for all WKU properties to determine potential greenhouse gas offsets. Such a program can be used as a tool to engage students in nation-wide competitions. The WKU Office of Sustainability has conducted university greenhouse gas emissions inventories in 2009 and 2012. These inventories serve to guide the institution in greenhouse gas reduction strategies, such as the conversion of the Central Steam Plant from coal to natural gas in 2011. The upgrade allows for heating of the main campus more efficiently, with lower environmental impact. The upgrade was financed completely with utility savings resultant from efficiency and conservation projects.

### Local Activities

The WKU Office of Sustainability, housed in a residence built in 1931, serves as a **best practice sustainability demonstration home**, providing students and community residents with well-researched, practical solutions to improving the performance of the average household. Students from a diversity of disciplines, including engineering, agriculture, environmental science, geography, and ecology, are engaged in monitoring before and after performance of the house and landscape. In October 2014, a photovoltaic array was installed on the house, with expectations that the house will be the first net zero electricity office on campus.

## LED Lighting

The <u>WKU PBS television studio</u> underwent a complete lighting upgrade in 2009. The conversion to LED technology resulted in energy use reduction of 97%. The studio is the only one of its kind on a college campus, providing students the opportunity to learn using the most innovative television studio technology in existence, attracting visitors from around the world, and earning the studio a regional technical Emmy Award. LED lighting is also used in athletic venue scoreboards and all campus surface parking lots, resulting in energy reductions of 95% and substantial energy cost avoidance.

## Water and Grounds

At WKU, we strive to utilize sustainable, best practices, such as water and energy conservation, storm water management, and lower combustion engines, while maintaining the highest level of aesthetic and appeal possible. Campus services have replaced all of our gas-burning riding mowers with lower emission, bio-ready diesel mowers. We are incorporating more drought resistant, native plant xeriscapes, rain gardens, and habitat gardens. Native plants attract a more diverse array of native animal species, further increasing biodiversity within the campus landscape. We are harvesting rainwater and using organic pesticides, such as neem oil, in our greenhouses. Many of our gardens are mulched with gravel, which does not break down and increases water infiltration to the soil. Since 2010, rainwater collection systems, used for irrigation, have been installed at five locations and collect as much as 45,000 gallons of water for watering campus trees and gardens.

In 2009, WKU, designated as a Municipal Separate Storm Sewer System (MS4) by the EPA, developed and implemented a comprehensive Storm Water Quality Management Plan. This plan includes broad strategies for improving water quality, including ecologically designed parking lots that reduce storm water runoff, the heat island effect, and energy consumption. In one parking lot alone, new design has resulted in **stormwater runoff reduction of 47%**. In some lots, Vortex systems were installed to remove oils, grease, and heavy metals from entering the unique karst groundwater system flowing beneath the campus. For decades, faculty and students have worked with officials of the City of Bowling Green to promote the development and practice of stormwater management on campus and in the community.

Since 2012, the <u>WKU-City of Bowling Green partnership</u> has also resulted in enhanced groundwater awareness through new, innovative public education and outreach activities. This model has served as an example for other areas to drive partnership approaches to engaging citizens in protecting their groundwater resources. To date, over 2,000 citizens in Bowling Green have participated in the program in some manner, with an additional 4,000 indirectly engaging with educational materials or changed behaviors to address groundwater issues.

## Waste Management

WKU has an extensive waste reduction program, overseen by the <u>WKU</u> <u>Recycling and Surplus Department</u>, which emphasizes upstream minimization, single stream recycling infrastructure, and surplus property reuse initiatives. These efforts have led to waste reduction of 11% and reuse of surplus materials of 33% in FY 12-13. Faculty and staff are encouraged to reuse furniture and office equipment, rather than buying new, and can view and reserve all available surplus property online through the "Topper Trader". Equipment not reused on campus is offered to regional non-profits for use. For example, refurbished surplus computers and monitors are donated to local schools. We are also actively engaged in integrating the use of Geographic Information Systems (GIS) in the optimization of waste and recycling collection procedures on campus.

In 2014, WKU initiated a <u>food waste composting program</u> for the main dining hall, resulting in diversion of approximately 15,000 tons of pre and post consumer food waste from the landfill to the Baker Arboretum where it is finished into compost and used on site for soil enrichment. Through our Environmental Health and Safety office, we have a comprehensive Hazardous Waste Management Program. The EHS Department maintains the RCRA Generator permit and ID numbers for all WKU campuses, and assists with proper disposal of regulated wastes in compliance with the Resource Conservation & Recovery Act. The EHS Department has also developed a <u>Spill Prevention Control and</u> <u>Countermeasure</u> (SPCC) Plan for petroleum product spills and conducts SPCC training for all oil-handling employees. Used battery receptacles are located around campus for safe and proper disposal of used batteries.

#### Transportation

At WKU, we seek to make going <u>car-free</u> as easy as possible for students, faculty, and staff. WKU Topper Transit has a fleet of eleven buses providing on- and offcampus transportation services for WKU's Main and South campuses (some two miles apart). Service is free to all students, faculty, staff, and visitors. Three fixed routes move passengers from point to point around campus. Off-campus service is used to transport passenger to and from area shopping, recreation, and housing centers. These buses utilize 5% biodiesel fuels, thus reducing their carbon footprint.

The City of Bowling Green offers public transit service to its citizens as GObg. The GObg routes extend to the WKU campus with several popular stops. The new purple line includes transportation to area supermarkets and local apartment complexes. Unlimited ride bus passes, for a full semester, are available at the WKU Parking and Transportation Services office for only \$10.00.

Beyond bus transportation, WKU has partnered with AlterNetRides to provide free ride matching and carpooling services, and with Enterprise Rent-A-Car to provide a campus-wide car-sharing program for faculty and students. The <u>Big Red Bikes</u> bicyclelending program, started in 2007 by GreenToppers, the WKU student environmental organization to promote sustainability awareness at WKU, refurbishes abandoned or donated bicycles for loan to students, faculty, and staff at no cost. Big Red Bikes remains a student-run program, managed by the Office of Sustainability in partnership with Parking and Transportation Services, which provides bicycles and support for a student bicycle mechanic to refurbish and maintain the bikes. The program is so popular that it is often a challenge to meet demand!

#### Pillar II. Improved Health and Wellness

WKU believes in the health and wellness of its student, faculty, and staff just as much as the health and wellness of the planet. Toward that goal, we have initiated several major programs to create a campus and community that live sustainably as individuals to better serve as stewards of our environment. We believe that engaging in healthy practices with regard to food choices, mental health, exercise, and reducing the cost of medical care through preventative measures all promote more active, aware, and motivated community that can turn their actions toward living sustainably. By integrating many of our infrastructural initiatives with positive personal behavior opportunities, WKU has established a sense of pride and ownership in its members to make personal choices that contribute toward a healthier, greener global community.

#### Environmental Health

WKU is proactive when it comes to indoor and outdoor air quality. The custodial staff uses Green Seal certified cleaning equipment (such as microfiber mops and sponges) and supplies (such as floor cleaner) in every building. This initiative results in improved indoor air quality, reduced water use, reduced waste, and eliminates chemicals that require special handling and disposal.

Integrated Pest Management is used both indoors and outdoors. Campus lawns and gardens are treated for pests only when needed, and treatment is used sparingly. Additionally, applications of pesticides and fertilizers (organic) are scheduled when the campus is largely unoccupied, during breaks or weekends.

The Environment Health and Safety Department monitors indoor air quality in all buildings regularly, with particular concern for radon and mold. <u>The EHS website</u> also has plentiful information on mold, air quality, moisture issues, and asbestos management for homeowners and residents. In addition, WKU partners with the EPA to provide educational information and <u>free test kits for radon</u> to homeowners.

### National Efforts

In July 2014, WKU became accredited by the National Safety Council as a <u>Safe</u> <u>Community</u>. WKU is only the fourth university, and 25<sup>th</sup> community to receive this accreditation in the nation. A Safe Community promotes safety and health to prevent injury and promote safety of its residents. Thanks to efforts from students and faculty, WKU was also designated as a <u>National Weather Service/NOAA Certified Storm Ready</u> <u>Campus</u> in 2013, serving to aid in the safety and well being of our faculty, staff, and students in the event of a severe storm threat. WKU is currently working on an innovative plan to become a *Climate Ready Campus* through a cooperative effort between multiple departments on campus, external partners, and the community. This initiative is aimed at developing resilience, at the campus level, against climate change and adaptation strategies in a sustainable manner.

## Local Efforts

Western Kentucky University supports the local food system in partnership with the Community Farmers Market (CFM). Through USDA grant funds, WKU and CFM are addressing the needs of underserved populations, improving access and affordability of fresh, local foods. A "<u>mobile market</u>" has been purchased and is used to deliver fresh, local, healthy foods to underserved populations (the mobile market also visits campus regularly). WKU has provided CFM space to operate year-round, supporting full-time farmers in their provision of local foods to the community. WKU has also partnered with the Community Farmers Market to accept Big Red Dollars (on campus student spending account funds). Through the "Double Dollar" program matches each Big Red Dollar (up to \$10) through private donations, incentivizing students to affordably purchase fresh, local, and healthy food.

The WKU Office of Sustainability is home to the <u>WKU Food Pantry</u>, offering food assistance to students, faculty, and staff. The Food Pantry is supported by both campus and community organizations, and is complemented by the campus community garden, also located there. A designated Food Pantry garden plot allows for inclusion of fresh vegetables in the Food Pantry, and demonstrated cooking classes are offered regularly at the Office of Sustainability as well.

WKU seeks to increase local food purchasing for campus dining outlets by working with local farmers to help them become approved vendors for our campus catering and dining services partner, Aramark. As a <u>Kentucky Proud campus</u>, WKU features Kentucky Proud products in dining outlets, convenience stores, and athletics venues. **Campus coffee shops utilize Udderly Kentucky milk, and, since WKU is a Fair Trade University, we offer Fair Trade coffee and tea options every day.** 

The <u>WKU ALIVE Center</u> for Community Partnerships exists to facilitate collaborative efforts that address local, regional, and global needs while enhancing the level of student learning and educational experience. The ALIVE Center houses programs and organizations, such as The \$100 Solution and Hill House, which provide WKU students with opportunities that cultivate personal growth, ethical values, and public action for the common good. The Center serves as an outreach arm of WKU's environmental and sustainability activities and supports engaged scholarship through service-learning and community-based research as part of the WKU curriculum and serves 27 counties in the surrounding region.

## Campus Health and Fitness

## Intramural-Recreational Sports

The mission of the <u>WKU Department of Intramural-Recreational Sports</u> is to provide quality programs, services, and facilities that enhance each individual's opportunity for leisure, recreation, fitness, and wellness in relation to his or her overall personal development. For over 60 years, through Intramural-Recreational Sports, students, faculty, staff, retirees, alumni, and the community have taken advantage of a variety of recreation and wellness related programs and services. Currently, the programs include Aquatics, Fitness, Intramural Sports, Informal Recreation, Outdoor Recreation, Sport Clubs, Wellness, and facilities, including the Raymond B. Preston Center, Hattie L. Preston Intramural Sports Complex, Bill Powell Natatorium, Health and Fitness Lab, Outdoor Recreation Adventure Center, WKU Disc Golf Course, and the WKU Leadership Experiential Education Center (Challenge Course). These are available through Intramural-Recreational Sports often for little to no cost.

### Health and Fitness Lab

The WKU <u>Health & Fitness Lab</u> provides fitness services, personal training, massage and consultation services to students, faculty and staff of WKU. The Lab provides all the fitness programming in the Preston Center: group fitness classes and services, including fitness assessments, exercise prescriptions, weight training orientations and healthy lifestyle counseling. Other programs offered are personal training, massage therapy, and instructional programs such as boot camp, and fitness certifications and workshops. These are also integrated into the Employee Wellness Program that provides incentives as part of the WKU health insurance package.

## Student Wellness Program

Recognizing that health and wellness related issues are among the most common barriers to student success, the WKU Health Services Health Education and Promotion Program provides health education and promotional programing to students. The Passport to Wellness program is a series of eight sessions offered throughout the school year to demonstrate aspects of health through activities, games, and speakers. WKU e-CHUG is a confidential self-assessment tool designed to give students feedback regaring their alcohol use. The WKU TopperWell program engages students as peer health educators that increase awareness of student health issues and positive lifestyle choices. Given the number and variety of health and wellness related programs and services on campus, the WellU® student wellness program was developed to promote all of these programs and services on one site. The WellU® Program includes the following components: environmental, financial, intellectual, occupational, physical, psychological, social, and spiritual. Collectively, these components holistically address a student's lifestyle choices to promote individual and community wellness. The program offers incentives for students that participate in a variety of wellness events and activities. such as group fitness classes, nutrition chats, preventative health screenings, and "fireside" chats about sexually transmitted diseases, eating disorders, handling stress and other such topics.

## Sport Clubs

Participation in the Sport Club Program at WKU can be an integral part of a student's overall learning experience. Through their involvement, students learn the value of wellness, engage in positive recreational behaviors, develop leadership skills, budgetary competence, management skills, and other professional qualities, which benefit them throughout their lifetime. Additionally, the Sport Club Program provides social and/or recreational opportunities for the entire Western Kentucky University community and fosters a sense of belonging amongst participants and the university.

## **Employee Wellness Program**

In January 2013, WKU partnered with a global provider of health management programs to launch a comprehensive, population-based worksite <u>wellness program</u> in which all full-time, benefits eligible faculty and staff can participate. In the 2015 benefits

open enrollment period, we launched the Top Life healthy campus initiative to integrate these wellness activities into the overall health plan design and to include participating spouses/partners. The mission of the healthy campus initiative is to provide a healthy campus culture for optimal health that leads to personal and professional growth and enriches the quality of life for faculty, staff and family members.

The employee wellness program comprises evidence-based and best-practice components that include data collection on employee health risks and interventions designed to promote health-related behaviors and better manage chronic diseases or conditions. Data collection and health awareness activities include a health risk appraisal (HRA) and biometric screening, which serve as a gateway to the interventions. The program includes a wellness portal and contains articles across ten healthy living topics and five health conditions. Incentivized activities include lifestyle and condition management coaching, Weight Watchers at Work, on-campus smoking cessation program, online health challenges, preventive care screenings, and aerobic activity and seminars.

Lifestyle management coaching is available by phone or online for a number of lifestyle-related behaviors, including weight management, nutrition, tobacco cessation, physical activity, stress management, high blood pressure and high cholesterol. Condition management coaching is available by phone to help individuals living with a chronic disease/condition, such as coronary artery disease (CAD), congestive heart failure (CHF), low back pain, health pregnancy, chronic obstructive pulmonary disease (COPD), diabetes, high-risk asthma, depression and high-risk pregnancy. The wellness program incentives provide the opportunity for employees to engage in healthy and sustainable choices, which are compounded when combined with reduced impact on the environment and health insurance expenditures.

#### Workplace Ergonomics

WKU encourages employees to follow sound ergonomic practices. The Ergonomic Workstation Assessment and Evaluation process provides employees with education, self-awareness, and onsite assistance if they believe their work area may not be optimal for ergonomics or if an injury has occurred. The departments of Human Resources and Environmental Health & Safety offer ergonomic workstation assessments for University faculty and staff. Providing an efficient and safe work environment for all employees is achieved through prevention and education programs, ergonomic risk assessments and consultations, and the implementation of control measures to limit ergonomic risks in the environment. Assessments involve a discussion of the problems followed by an examination of the interface between the employee and their computer, desk, phone, etc. Recommendations are then made and assistance offered for corrective action. With the addition of ergonomic loaner chairs and other equipment, an increase in requested evaluations has increased significantly since 2011. There has been an increase in the number of departments and individuals requesting evaluations, and evaluations conducted as a result of work related injuries have decreased.

### Pillar III. Effective Environmental and Sustainability Education

While WKU stands strong on the first two pillars already discussed, our primary strength lies in our mission as an educational instruction. In this capacity, we strive to communicate the myriad green practices to our students and the community and incorporate an environmental and sustainability theme in a growing number of our courses, student activities, and educational initiatives. We are committed to promoting sustainable practices and providing opportunities for students to engage in international learning and research related to these guiding principles. For example, since 2013, several students were awarded a <u>Global Pathways to Sustainability Scholarship</u>. In addition, each year a faculty member and a student are recognized with the <u>President's Award for Sustainability at WKU</u>. These individuals demonstrate leadership in education and/or activities that promote sustainability at WKU and instill a culture of stewardship, conservation, and social responsibility. The environmental education efforts at WKU are too numerous to list; therefore, selected examples below highlight our creative and dedicated approach to effective environmental and sustainability education at all levels.

## Environmental and Sustainability Programs

WKU has over a dozen academic degrees focused on the environment or sustainability ranging from certificates to graduate degrees. These programs are rooted in the physical sciences, business, public health, social sciences, and interdisciplinary studies, thereby providing depth and interdisciplinary structure to our offerings. In Fall 2014, as a response to the growing demand of majors in the environmental field and the prevalence of this type of research being conducted by WKU faculty, we created a <u>B.S.</u> in <u>Geography and Environmental Studies</u>, to provide curriculum content and research opportunities with an interdisciplinary, socio-environmental focus. Housed in the Department of Geography and Geology, the major includes courses from many departments around campus.

At the graduate level, **WKU is home to the only master's program in the country that addresses the inter-related themes of social justice, community studies, and environmental sustainability**. The <u>MA in Social Responsibility and</u> <u>Sustainable Communities</u> was approved in 2011 and has since graduated two cohorts. These students have been offered (and accepted) positions ranging from sustainability coordinators and directors of corporate social responsibility programs to urban planning team members, non-profit administrators, and doctoral teaching assistants. As an online program, the MA is an attractive option for Kentuckians and others, nationally and internationally, and helps prepare students for the challenging task of leading communities to social and environmental health.

Students are involved in ALL of our sustainability programs, actively researching the successes, challenges, and future goals of our initiatives to ensure we are meeting, and even learning how to surpass, our goals and expectations at WKU. As examples,

• A group of Geoscience students investigated stormwater quality and the best practices for monitoring and mitigation of pollutants on campus and in town.

- Multiple chemistry students are currently working as a team to develop printable organic solar cells.
- A team of undergraduate and graduate students in Architecture and Manufacturing Sciences is working on a solar energy window tint.
- In February this year, Engineering and Geoscience students worked together on the <u>National Corvette Museum sinkhole</u> to investigate its occurrence and address issues related to natural hazards in karst areas.

Other students study glacier melt in Peru, <u>water literacy in West Africa</u>, climate change in South America, harmful algal blooms from human impacts in Kentucky, mitigating hazard waste transport on highways, and dozens of other projects related to environmental and sustainability research across our campus in interdisciplinary, innovative ways. Many of these research projects at the undergraduate level are possible because of internal grants made available through the WKU <u>Faculty</u> <u>Undergraduate Student Engagement (FUSE) program</u>, which provides \$5,000 awards to faculty-mentored undergraduate student research projects.

Emphasis is placed on STEM learning outcomes in many WKU courses, such as Our Dynamic Planet, Our Vulnerable Planet, Global Sustainability, Intro to Environmental Science and Sustainability, and Climate, Society, and Resources, which are all part of the general education program. Every WKU student has an opportunity to take a course that challenges his or her perception of the world's dynamic environment.

An example of an innovative course is <u>Environment and Journalism</u>, which put geoscience and journalism students into teams to learn strategies to effectively communicate environmental science topics through media, particularly the Bluegrass Pipeline and coal in Kentucky. Another is the Global Environmental Change course taught in conjunction with Bowling Green High School wherein undergraduates from WKU joined high school seniors to learn about environmental service learning. This program included the creation of sustainable initiatives, such as a recycling program, greenhouse restoration, and raising bees for local honey.

Finally, certificate programs are designed to allow flexibility and cross-training during a degree program to produce highly qualified candidates for jobs at the local, state, and federal levels. Certificate programs include: Environmental Education for Educators, Floodplain Management, Global Pathways to Sustainability, and an MBA Sustainability certificate. These diverse degree offerings at WKU indicate the wide range of expertise and depth our faculty provide using effective curricular models to meet all levels of student need.

## Outdoor Classrooms and Labs

WKU is heavily invested in land conservation and ecological protection for the purpose educational outdoor classrooms. Currently, WKU owns over 2,500 acres of property purchased through state and federal land grants, foundation funding, sponsored funds, and donations. These include the Green River Preserve, Crumps Cave Education and Research Preserve, McChesney Field Station, Shanty Hollow,

Baker Arboretum, Lost River Cave and Valley, the WKU Challenge Course, WKU Agriculture and Education Complex (hosts Farm and Vineyard), and the Mammoth Cave International Center for Science and Learning, and all of which serve as education and outreach avenues for our students and the broader community. These outdoor classrooms are utilized by numerous academic disciplines, including recreation administration, outdoor leadership, physical education, public health, cave and karst study, geology, geography, biology, chemistry, teacher education, environmental science, agriculture, horticulture, environmental health, construction, engineering, history, public relations, marketing, advertising, graphic design, sustainability, and more.

The <u>Green River Preserve</u> of over 1,500 acres bordering the Green River is home to some of the most biodiverse wildlife in the nation and includes seven miles of river frontage and protects 12 endangered species. It was awarded the first annual Stewardship Award in 2010 by the Kentucky Heritage Land Conservation Fund Board for management of the Preserve and the 2012 Biological Diversity Protection Award from the Kentucky State Nature Preserves Commission. Since its acquisition, courses and student projects have involved zoology, ecology, wildlife, aquatic field biology, entomology, plant taxonomy, structural and environmental geology, folk studies, vernacular architecture, field anthropology, and others from visiting universities.

Through the <u>Crumps Cave Preserve</u> and a close relationship with Mammoth Cave National Park, WKU faculty have educated thousands of visiting students and scholars from all over the world about groundwater and cave and karst processes. Karst landscapes are iconic to south-central Kentucky and unique in that over 25% of the world's population lives on and obtains its drinking water from underground aquifers like those found in our region. Cutting edge scientific research spanning the study of groundwater quality to carbon sink quantification and climate change impacts is conducted by WKU students in an ongoing basis at these sites.

Another avenue for global sustainability and environmental learning is the <u>Semester at Sea program</u>, with which we have been partnered for nearly five years. Through this program, our students are able to participate in multi-week to semesterlong courses focused on themes like water, climate change, environmental engineering solutions, environmental health, ecotourism and sustainable development, and sustainable service learning all while sailing around the world. At each stop, WKU students experience learning at its finest in remote settings or are immersed in urban cultures where they apply concepts learned in their courses to deal with real issues related to environmental degradation and sustainable communities.

#### Civic Knowledge and Community Engagement

WKU is home to The \$100 Solution non-profit service learning organization. Their mission is to engage students in sustainable projects to assist communities in being better places to live and learn. To date, over 200 projects have been completed, many of them having an environmental component. In 2014, the ALIVE Center and WKU Housing and Residence Life collaborated to offer WKU's first themed housing: The \$100 Solution House. Student residents of the newly renovated home conduct service

learning as embedded members of the community, while demonstrating green living practices.

To date, WKU has hosted hundreds of international study abroad and national study away programs to provide our students with exposure to different cultures. We offer 25 or more of these per year, with many of them focused on global citizenship, environmental, or sustainability themed topics. Some examples include *Waters of the Caribbean*, the *Climate Change Challenge across Northern Europe, Rural Environmental Health in Belize, Ecotourism in Costa Rica, Flooding and Hurricanes in Florida*, and *Agriculture at the Equator in Ecuador*, among others. These courses integrate STEM concepts with globalized immersive learning experiences to generate socio-environmental critical thinking skills for the students to bring back to their classrooms at WKU and share with their peers. One of these initiatives is the Tree of Change project, wherein students planted a community climate change tree on the University of Akureyri campus in Iceland, then returned and planted an identical tree on WKU's campus. These symbolize a joint global effort to discuss the topic of climate change and how to address it, with the trees as community gathering places for academic discourse.

Recently, in November 2014, WKU hosted the <u>2014 Campus Community</u> <u>Partnerships for Sustainability conference</u>, Kentucky's annual higher education sustainability. This activity shows our dedication as a leader in providing avenues by which the community, campus, and surrounding region can meet to share and discuss green initiatives targeted for university audiences.

#### WKU as a Living Laboratory

At WKU, we are intentional about <u>engaging students in education and research</u> that addresses campus sustainability challenges and issues. This effort results in benefits to students and the university. Some examples include Honors College Capstone Experience/Thesis projects such as: *Building a Better Office of Sustainability: Promoting Sustainable Change and Educational Outreach at WKU*; *Rebranding the Office of Sustainability*; and *Rainwater Harvesting: Examining the Potential of Rainfall Collection as a Stormwater Best Management Practice and a Supplement to Municipal Water at WKU*. Another example is a graduate thesis examining waste reduction practices and potential opportunities for improved performance. More information on these projects is found on the Office of Sustainability website <u>student projects page</u>.

We also offer a campus <u>Green Tour</u> with accompanying online guide and 11 interpretive signs placed throughout campus that describes our green initiatives. Students in different classes were involved in the development of the signs. Currently, a graduate student is researching the educational effectiveness of the signs for her thesis research. The intent of the signs is to communicate environmental initiatives to the campus and broader communities.

Other projects include engaging GIS students to build a GIS-based campus tree inventory, working with Manufacturing and Engineering students to design and build a

pallet garden shed at the WKU Community Garden, and allowing biology students to build a hugel garden in the WKU Community Garden to compare hugel garden resource inputs and outputs to conventional raised bed gardening. At the WKU Farm, engineering students have built a system for processing used cooking oil, obtained from the dining hall, into biodiesel, which is used to fuel the farm equipment. Project Grow is a program that offers fellowships to students for research, development, and maintenance of the landscape at the Office of Sustainability as a best practice demonstration.

## **III.** Conclusion

At WKU, being green is not simply a catchphrase or afterthought created from a bandwagon approach to being environmentally sensitive. We embody the spirit and action of sustainability through dedicated efforts to stand strong on all three pillars of the Green Ribbon Schools Award program. Being a green campus is not about size or available funding. At WKU, it is about creating a community of scholars dedicated to the pursuit of a sustainable future, both locally and globally, which spans disciplines and encourages engagement from every member. As demonstrated above, the faculty, staff, and students at WKU have for decades strived to pioneer sustainable initiatives and bring about change within the community to promote global environmental health. In recent years, we have raised our goals to include quality of life, an international scope, and new technologies. We have increased our research engagement with students to address some of the world's most critical environmental problems using a range of discipline-focused and interdisciplinary approaches, while continuing to make progressive changes on our campus to reduce energy costs and our carbon footprint.

WKU stands out among the other universities in Kentucky with respect to its environmental leadership. In recent years, our focus on the environment has spurred action under all three pillars considered in this award, solely because it is the right thing to do. As an institution, we feel a moral obligation to our students, our community, and the planet to do our part in mitigating environmental problems through sustainability initiatives and by training our students to prepare for crucial emerging issues. We submit this proposal based on actions we are already taking to become a greener campus and greener global citizen; receiving recognition for these efforts would only serve to bolster our resolve and encourage the momentum we have built toward a sustainable future.