VII. STANDING COMMITTEES

B. Finance and Asset Management Committee

Sustainability Engagement at the University of Washington

For information only.

BACKGROUND

UW Sustainability (all three campus focus)

UW Sustainability (formerly Environmental Stewardship & Sustainability) supports the University of Washington’s sustainability goals and connects the campuses, faculty, students and staff together to achieve them. The Environmental Stewardship Committee (ESC), the Campus Sustainability Fund (CSF), the Green Seed Fund (GSF), and other programs and offices work to increase campus sustainability. UW Sustainability coordinates University-wide initiatives such as the Climate Action Plan (CAP) and is responsible for gathering and reporting on University's sustainability data internally and externally.

With the University of Washington receiving the most grant money of any public institution in the United States - and harboring over 4,500 laboratories on campus alone, Green Labs, a new initiative was launched to support and implement sustainable laboratory practices.

The goal of the student-created, student-funded, and student-managed CSF is to foster positive change by giving the UW community the opportunity to develop, create, and implement their ideas. Since its establishment in 2010, the CSF has awarded more than $1.1 million to student-led sustainability projects.

GSF was created in 2013 to engage faculty, students, and staff in research opportunities that advance sustainable research while contributing to campus sustainability goals. Since its establishment in 2013, the GSF has awarded over $250,000 to sustainability projects and will award the same level of funding this year.

The University’s sustainability goals is guided by the Climate Action Plan and ongoing conservation measures continue to provide cost and energy savings. UW completed a five year project for the Smart Grid electricity monitoring system and currently expanding its long range utility infrastructure plan with the West Campus Utility Plant.
B. Finance and Asset Management Committee

Sustainability Engagement at the University of Washington (continued pg. 2)

UW Bothell

Environmental sustainability has long since been a key factor driving the evolution of the University of Washington - Bothell. From the campus wetlands, to the three on-campus photovoltaic solar installations, to the variety of courses offered focused on environmental sustainability.

UW Investments

Environmental, Social, Governance (ESG) related issues is one of multiple possible approaches used by institutional investors to incorporate social considerations. UW Investments believes that positive engagement, a core component of ESG investing, is best for endowment management. The UW five-point Global Climate Change Initiatives from Nov 2013 prioritize ESG.

Attachments

Presenters’ Biographical Information
University of Washington Sustainability Engagement presentation
The North Creek Wetland
Presenters’ Biographical Information

Tony Guerrero, Associate Vice Chancellor for Facilities Services, UW Bothell. Tony has been in facilities management for over 30 years. His career in facilities management began with the State of Arizona in the mid 1980’s before moving to Seattle in 1989. He began working for the University of Washington in Seattle as the Southwest Maintenance Zone Manager in June of 2000 and has been in charge of UWB/CC facilities services since the summer of 2003. Tony has a certificate in Facilities Management from UW Seattle, a Bachelor’s degree in Business from UW Bothell and an MBA from Seattle Pacific University. Tony won the coveted Husky Green Award in 2011 for his exemplary leadership, initiative and dedication promoting the University of Washington’s commitment to environmental stewardship and sustainability.

Laurel Baum, Junior, BS Environmental Sciences (Conservation & Restoration Ecology Pathway), UW Bothell. Last summer Laurel participated in field research at both the Wind River and HJ Andrews Experimental Forests as part of a LTER project concerning forest succession run by the Forest Ecosystems and Society program at Oregon State University. Throughout the summer of 2015 Laurel will be conducting independent research on Mount Saint Helens with Professor Cynthia Chang of UW Bothell. Her research goal will be to better understand plant succession within the context of altering availability of soil temperature, moisture, and light. Upon graduation, Laurel intends to hike the PCT from Mexico to Canada then find work in the Environmental Education or Conservation fields. She is also considering continuing on to graduate school to complete a Masters.

Emily Ann Clarkson, Senior, BA Political Economy, BA Business Administration (Finance).

Emily Clarkson is a student researcher helping UW Investments understand the risks, benefits, and general considerations related to Environmental, Social, Governance (ESG) investing. ESG is one of multiple possible approaches used by institutional investors to incorporate social considerations. UW Investments believes that positive engagement, a core component of ESG investing, is best for endowment management. The UW five-point Global Climate Change Initiatives from Nov 2013 prioritize ESG.
**Caileigh Shoot, Green Labs Coordinator. Senior, BS, Environmental Science and Terrestrial Resource Management.**
As a Green Labs Coordinator, Caileigh supports the Green Laboratory Program at the University of Washington. This program works to reduce the environmental footprint of UW laboratories by recognizing labs that are reducing their footprint, and providing resources for those that need more help. In addition to supporting the Green Laboratory Program, Caileigh is also working on her senior research project which involves using remote sensing technology (LiDAR) to detect shrubs on a 26 hectare plot in Yosemite National Park. Caileigh has worked on several UW field ecology crews including a crew which mapped old growth trees (125 years or older trees) in the Colville National Forest. She is also co-chair of the University of Washington Forest Club.

**An Huynh, CSF Outreach Coordinator, Senior, Community, Environment, and Planning; Environmental Science & Resource Management** Currently a senior studying Community, Environment, and Planning with a minor in Environmental Science and Resource Management, An is focusing her academic explorations around urban ecology. She is fascinated by design concepts that link the built and natural environments and is interested in how to combine visual storytelling, especially those that are based around photography, with issues surrounding urban planning and community development.

**Claudia Frere-Anderson, Director of UW Sustainability**
Claudia manages the office and oversees communications, reporting, and engagement programs in addition to supervising staff and many students and interns. Claudia graduated Cum Laude in Politics from the University of San Francisco and received an MBA in Corporate Social Responsibility from Nottingham University Business School in the UK where she received a full scholarship from the International Centre for Corporate Social Responsibility (ICCSR).
University of Washington Sustainability Engagement

Board of Regents Meeting
March 12, 2015 / UW Bothell

Tony Guerrero, UW Bothell
Laurel Baum, UW Bothell Student
Caileigh Shoot, UW Seattle Student
Emily Ann Clarkson, UW Seattle Student
An Huynh, UW Seattle Student
Claudia Frere-Anderson, UW Sustainability

Sustainability: it’s in our nature.
Sustainability Leadership

- Vermicomposting since 2004
- Wetland and Campus Tours since 2004
- Herbicide and pesticide free since 2006
- Goats to clear weeds beginning in 2007
- 2nd University in Nation - Salmon Safe 2008
- Comprehensive energy monitoring - 2010
- 10 Electric Vehicle spaces installed - 2010
- No paper towels in UWB restrooms – 2013
- Awarded $1.3 million dollars in energy grants 2010-2014
- 150 kW of Solar Installed on Campus 2010 - 2014

Sustainability: it’s in our nature.
North Creek Floodplain Restoration
• Focal point for sustainability related research and management
Green Labs

Why Green Labs?
• Labs account for 22% space, yet use 65% campus energy
• Large water usage and waste generation
• Less sustainability focus in labs versus other areas of UW
• $1.25 billion in research annually
• Potential for large savings – est. $8 million
• There are currently over 4,500 labs on campus tracked by UW Environmental Health & Safety

Sustainability: it’s in our nature.
## Green Labs

### Certification Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Result</th>
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<tbody>
<tr>
<td>Communication &amp; Education</td>
<td>All labs that communicate are certified</td>
</tr>
<tr>
<td>Energy</td>
<td>58% never clean their freezer/fridge</td>
</tr>
<tr>
<td>Recycling, Compost, &amp; Waste</td>
<td>48% always try to produce less waste</td>
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<tr>
<td>Chemical Usage &amp; Disposal</td>
<td>47% never practice green chemistry</td>
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<tr>
<td>Purchasing</td>
<td>25% have energy efficient equipment</td>
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<tr>
<td>Travel &amp; Field Work</td>
<td>Most use public transit or carpool</td>
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<tr>
<td>Water</td>
<td>59% don’t use aerators/misers</td>
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### Accomplishments to date

- **50** Certified Labs (68 submitted)
- **67%** of labs certified in 2013 were re-certified in 2014 (12 of 18 labs)
- **Over 1,350** people are in labs that applied for certification

*Sustainability: it’s in our nature.*
Environmental, Social, Governance (ESG) Research

Student project update

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<tr>
<td>• Started introductory ESG research</td>
<td>• Started researching prospective ESG managers and sustainable funds</td>
<td>• Researched academic studies that compared social investment approaches and outcomes</td>
<td>• Researching companies held in the newly invested ESG fund</td>
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<tr>
<td>• Created a searchable ESG Research Index of hundreds of topical articles and reports</td>
<td>• Sized the ESG investment universe</td>
<td>• Evaluated additional ESG screening tools</td>
<td>• Analyzing the gap between UW and peers in STARS survey</td>
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<tr>
<td>• Presented an introduction to ESG issues to UW Investments</td>
<td>• Drafted a memo to UW Investments team explaining the ESG investment universe</td>
<td>• Researched how UW peers are approaching ESG</td>
<td>• Researched YieldCo’s and other types of ESG related investment opportunities</td>
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<td>• Summarized relevant articles, webcasts</td>
<td>• Maintained ESG Research Index</td>
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<tr>
<td>• Researched ESG related organizations</td>
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Sustainability: it’s in our nature.
Why spend time researching ESG?

- Best blend of high impact, low cost
- UW efforts include shareholder engagement, new ESG investment, and better understanding of the ESG exposure already present in the UW portfolio

<table>
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<th>Low cost</th>
<th>High cost</th>
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<tr>
<td>• Improve understanding of current and prospective manager approaches to ESG</td>
<td></td>
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<tr>
<td>• Encourage ESG consideration at existing managers</td>
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<tr>
<td>• Evaluate portfolio risks tied to ESG factors</td>
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<tr>
<td>• Become members of ESG-related organizations (e.g. SIF, Ceres, CDP)</td>
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<td>• One-time divestment from “worst-in-class” companies</td>
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<tr>
<td>• Integrate United Nations Principles for Responsible Investing (UNPRI) guide for manager selection, appointment, and monitoring</td>
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<tr>
<td>• Require existing and new managers to incorporate ESG factors into their process</td>
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Defined as cost and impact to the endowment

Sustainability: it’s in our nature.
Campus Sustainability Fund (CSF)

Over $1.1 Million dispersed since 2010-2011

Sample Past Projects
• UW Solar Installation on Mercer Court A
• Green Wall Interactive Educational Elements and Habitat Structures
• UW Farm Greenhouse

Sample of Current Projects in Review (8 Total, $212,000)
• Conservation and Sustainability at Manastash Ridge Observatory
• Kincaid Ravine Bioswale Assessment
• Re-Think: Student Resilience Challenge

Sustainability: it’s in our nature.
Green Seed Fund (GSF)

Over $500,000 dispersed since 2013-14

Sample Past Projects
• Grounds Utility Vehicle Carbon Footprint Comparison
• Building User Audit: Capturing Behavior, Energy and Culture

Sample Current Projects 2015-16 ($250K)
• Enhancing the Sustainability of Electronic Waste Handling on the Seattle Campus
• Examining Opportunities for Durable Medical Equipment Reuse within UWMC and HMC
• UW Tacoma Husky Lines
Engagement and Collaboration

• Advised by the Environmental Stewardship Committee (ESC) and guided by the Climate Action Plan

• Policy development: Server virtualization, Steam-to-hot water conversion, Efficient labs

• District Energy

• Smart Grid

• Sustainability in the Curriculum
Energy Conservation

We increased our total savings from $11.9 million in 2011 to an estimated $13.1 million saved in 2013.

Sustainability: it’s in our nature.
Claudia Frere-Anderson  
Director, UW Sustainability Planning & Management  
frerec@uw.edu

Ruth Johnston, Ph.D  
Associate Vice President & Chief of Staff Planning & Management  
ruthj@uw.edu

http://green.uw.edu/staff

Sustainability: it’s in our nature.
THE NORTH CREEK WETLAND
A LIVING, LEARNING LABORATORY

SARAH SIMONDS GREEN CONSERVATORY

Completed in the summer of 2013, the beautiful Green Conservatory is a 2,800 square-foot complex that houses a 1,600 square foot greenhouse, classroom, and support space for education, research, and public outreach.

The construction of the Sarah Simonds Green Conservatory was funded by a generous $4.5 million gift from Dr. Gordon Charles Green. His vision was to create a conservatory that's both accessible to the public and dedicated to the legacy of his pioneering Bothell family.

SUSTAINABILITY

- The North Creek Wetland restoration is one of the largest floodplain restorations in the state of Washington.
- UW Bothell was the second university in the nation and first in the state of Washington to be Salmon-Safe Certified.
- The campus plants 3,000 trees per year.
- The U.S. Army Corps of Engineers uses our wetland as a model for future sites.
- A $553,000 grant from the Washington State Department of Commerce has allowed the installation of our largest solar array to date, with a capacity of 99.84 kilowatts.

EDUCATION AND RESEARCH HIGHLIGHTS:

- UW Bothell offers seven degree programs and two minors related to environmental sustainability.
- More than 20 classes use the wetland as an outdoor lab.
- Three students will present poster presentations based on research in the wetland at this week's “Society for Northwestern Vertebrate Biology” conference in Portland.
- Other recent student papers include “Effects of Crows on Wetland Plant Communities” and “Temporal Variability of Nitrate Concentrations”
- A student-led project is building a geodatabase to map hydrological features and plant communities in the wetland. They will present their findings Feb. 27 on campus.
- Faculty research includes Rob Turner (hydrology/environmental chemistry); Kristina Hillesland (microbial fauna of wetlands); Doug Wacker (effects of crows on soil chemistry in the wetland) and Jeff Jensen (biomechanics of fish).

UW BOTHELL is one of very few universities in the nation to share its campus with a fully restored, thriving wetland. Situated on 58 acres, the North Creek Wetlands offers students the opportunity to combine classroom learning with hands-on experience in the field.