

Communicating Sustainability at Royal Roads University

Final Report



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ENSC 420 Major Project Team 1

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Executive Summary

The goal of this project is to address a recommendation outlined in the 2010 Sustainability Tracking, Assessment, and Rating System Report (STARS) conducted at Royal Roads University (RRU). The report, which assessed the sustainability of the RRU campus, identified the need for a communication strategy which would express current sustainability initiatives and increase awareness and cooperation on campus. By increasing communication, RRU could enhance their STARS rating in future reports and advance towards meeting their sustainability goals.

RRU maintains a strong focus on developing initiatives to be a leader in sustainability. There are numerous stakeholders involved in these initiatives and many were also involved in the development of this project. Through collaboration, planning, and research, it was determined that the most effective way to achieve the communication goal was to create a comprehensive online Campus Green Guide and a Moodle-based interactive orientation to be available to the RRU community.

The aim of the material produced is threefold: 1) to educate and orient staff, faculty, and students at RRU to sustainability on campus; 2) to encourage participation in areas including energy, transportation, food, waste, water, paper, community and volunteering, and campus ecology; and 3) provide an introduction to the RRU campus as well as the Moodle platform for students. Collaboration with staff from the Centre for Teaching and Educational Technologies and Branding Marketing and Recruitment enabled the production of materials which were professional and aligned with RRU's image and goals.

The report outlines a methods and results timeline which follows the creation of the online Green Guide and Moodle-based interactive orientation. It concludes with descriptions of each of the communication modes and follows with recommendations. The key areas addressed in the recommendations are maintaining the RRU Campus Green Guide and Moodle orientation, monitoring the effectiveness of both media, improving and enhancing communication through other means, and addressing supplementary recommendations identified through project development. The key recommendations are as follows: update and/or modify the RRU Campus Green Guide and Moodle orientation annually to ensure the content remains current; ensure all computers on campus have Flash reader software installed so the quiz can be easily accessed from any computer on campus; monitor visits, or "hits", to the Campus Green Guide in order to monitor its effectiveness over time; connect with new cohorts, staff, and faculty at RRU prior to their arrival on campus; continue to develop and enhance sustainability communications on campus through a project by a group in the Professional Communication cohort; and connect campus sustainability to course outlines to get students involved in sustainability at RRU.

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Glossary of Terms

Blog: An online web log that receives frequent commentaries by a given user about a wide range of topics. A blog can be interactive and informative of a given topic and also allows readers to post comments on the posted blog.

Ecologically-sensitive siting: Identifying sensitive sites on campus such as old growth forest, creek waterways, and wetlands. These areas require special protection in order to maintain the strength and character of the location.

Ethical review: A review process that is required for research that involves human subjects. At Royal Roads University, the ethical review forms and documents are prepared by the researchers and they are reviewed by the Royal Roads University Research Ethics Board or one of its sub-committees (RRU, 2011b).

Flash: A multimedia application that adds animation, video, and interactivity to web pages.

Grid-positive: The concept of generating more power on-site using renewable energy than the campus consumes (Dyer, 2011).

Midden: A domestic waste site also referred to as a “kitchen midden” or “shell heap”. Middens are features that contain waste products relating to day-to-day human life. They may be single-use sites created by nomadic groups or long-term waste sites established by settled communities over several generations.

Net zero: A concept for buildings or developments, such as the RRU campus, in which technologies are employed to maintain zero net energy consumption and zero carbon emissions annually. Net zero buildings/developments can operate independently or the energy grid supply.

Ride-sharing: A form of transportation, other than public transit, in which more than one person shares the use of a vehicle to make a trip, reducing the demand on the roadway system (Rodrigue, 2011)

Roadspiel: A weekly electronic newsletter for staff and faculty at RRU.

Sustainability: As defined by AASHE, “The achievement of simultaneous environmental, social, and economic prosperity within the community and the world as a whole” (AASHE, 2010).

Acronyms

AASHE: Association for the Advancement of Sustainability in Higher Education. AASHE is an organization of higher education institutions that provide a network of support and resources to enable the development and advancement of sustainability initiatives, from governance and operations to education and research (AASHE, 2011).

BMR: Branding Marketing and Recruitment

BSc: Bachelor of Science

CTET: Centre for Teaching and Educational Technologies. This service division at Royal Roads University supports faculty with educational and computer technologies (RRU, 2010a).

ESA: Employment Skill Access

GHG: Greenhouse Gas

HMCS: Her Majesty's Canadian Ship

LEED: Leadership in Energy and Environmental Design

Moodle: Modular Object-Oriented Dynamic Learning Environment. Moodle is an e-learning software platform that was developed to help educators create online courses with a focus on interaction and collaborative construction or content. Moodle can be run on Windows and Mac operating systems. Anyone who uses Moodle is a Moodler (Moodle, 2011).

PDF: Portable Document Format

RRMC: Royal Roads Military College

RRU: Royal Roads University. Royal Roads University is located at 2005 Sooke Road, Victoria, British Columbia, Canada.

STARS: Sustainability Tracking, Assessment and Rating System. This program was developed by AASHE and provides the framework for institutions to enhance all aspects of their campus sustainability through participation in a transparent self-reporting system (AASHE, 2010).

ULSF: University Leaders for a Sustainable Future

1.0 Introduction

Royal Roads University (RRU) is dedicated to sustainability and stewardship and is one of the select post-secondary institutions in Canada that have programs and research strongly focused on the environment and sustainability (RRU, 2008). Because environmental sustainability is fundamentally linked to the teaching and research mandate at RRU, there are many ongoing projects centered on sustainability (RRU, 2011a).

1.1 History

RRU has a long and intriguing history with varying land stewardship practices. James Dunsmuir purchased the property in the early 1900's and developed the Hatley Park Estate, currently one of the last standing Edwardian estates in Canada. The Government of Canada purchased the land in 1940 from the Dunsmuir family and it served as a tri-service military training institution, first named HMCS Royal Roads and then Royal Roads Military College (RRMC), until 1995. After 55 years as a military institution, Hatley Park was declared a National Historic Site and was secured as an educational institution under the *Royal Roads University Act*. RRU became a special purpose university, tasked with protecting the history of the Dunsmuir's and RRMC and preserving the area for future visitors (RRMC, n.d.). Moreover, RRU has a commitment to providing applied and professional programs, accessible online and on campus, to working people under their four founding pillars: leadership, conflict resolution, entrepreneurship, and sustainability (RRU, 2008).

In 2000, the RRU Board of Governors passed the Environmental Stewardship Policy, which committed RRU to being a global leader in environmental sustainability (RRU, 2008). In 2008 the institution signed *The Talloires Declaration*, a pledge to sustainability for institutions of higher learning (ULSF, 2008). This requires RRU to make special considerations in relation to the setting of the campus and its special features that require protection. The campus contains one of the last characteristic old growth Douglas-fir forests in British Columbia, featuring some of the largest and oldest trees in the Province (RRU, 2010b). The grounds also hold cultural significance which can be seen in the culturally modified "trees of life" and shell middens from the First Nations who once inhabited the area. These historical treasures are an important consideration in the RRU Sustainability Plan.

1.2 Current and Future Initiatives

RRU is making great efforts to be a leader in sustainability. The 2008 Royal Roads University Sustainability Plan highlights the key initiatives of the Campus Master Plan and documents the

institution's commitment and leadership. It includes initiatives, timelines, responsibilities, and some preliminary costing. The four main targets set out in the Sustainability Plan are: achieving climate neutrality by 2010; becoming self-sufficient in energy, waste, and water (going "off-grid") by 2018; reducing net greenhouse gas (GHG) emissions by 50% from 2007 levels by 2020; and learning from past experiences to develop best practices (RRU, 2008). These four targets led to the development of several initiatives, which complement BC's Climate Action plans. The five over-arching initiatives are as follows: greenhouse gas management; going "grid-positive"; demand management of transportation; ecologically-sensitive siting and heritage conservation; and university stewardship (RRU, 2008).

The goal to be climate neutral by 2010, one of the four main targets set out in the 2008 Sustainability Plan, was accomplished by reducing emissions and purchasing over \$40,000 worth of carbon offsets from the Pacific Carbon Trust (N. Wilkin, personal communication, 2011). Specific initiatives that advance reduction of reduce GHG emissions on campus and work toward the other three main targets are extensive. For GHG management, RRU will conduct an inventory of all GHG emissions on campus every year and develop a comprehensive strategy that includes tangible actions to reduce GHG emissions. For becoming "grid-positive", RRU is considering three small-scale options for future development on campus: a co-generation facility, a compost waste facility, and a wastewater treatment facility. For demand management of transportation, RRU is working towards reducing the number of single-occupancy commuters and increasing usage of alternative modes of transportation such as public transit, ridesharing, cycling, and walking. RRU is also working on parking lot consolidation and implementing a new parking fee structure. For ecologically-sensitive siting and heritage conservation, RRU is maximizing re-use of existing buildings and constructing new facilities on previously-disturbed areas, encouraging a pedestrian-friendly and interactive campus with mixed-use buildings, and using green building standards including energy conservation, pollution reduction, and use of local sustainable resources. Finally, for university stewardship, RRU provides recycling and compost collection bins throughout campus, offers sustainable food and packaging options at the Habitat Café, utilizes an adaptive pest-management system in the gardens and lawns, and purchases items such as desks, chairs, and computers based on energy use ratings and the supplier's commitment to the environment (RRU, 2008). Through the many sustainability initiatives that are currently ongoing or planned for the future, RRU is working towards creating a climate-neutral, grid-positive green campus and a fundamentally linked education and research environment (RRU, 2008).

1.3 Sustainability Tracking, Assessment and Rating System

A 2010 RRU Major Project team completed a Sustainability Tracking, Assessment and Rating System (STARS) report that assessed the sustainability of the RRU campus. An overall silver rating was achieved, and RRU may apply for a re-evaluation in 2013. The 2010 STARS report identified the need to speak to sustainability issues during new student and employee orientation (Bauman, Cochrane, Cosme, McNabb & Taylor, 2010). Taking action on this recommendation was the project defined for BANKS Technology's Major Project.

1.4 BANKS Technology's Major Project

This report outlines the development of the RRU online comprehensive Green Guide, condensed printable PDF, and interactive Moodle orientation for RRU with the objective of communicating current and emerging sustainability initiatives to faculty, staff, and students. Topics covered in the guide and orientation includes RRU's sustainable approaches to energy, transportation, food, waste, water, paper, community involvement, volunteering, and campus ecology. The report details the stakeholders in the project, the methodology used to determine which outlet was best for communicating sustainability at RRU, the results of the project, and final recommendations for monitoring the effectiveness of both materials as well as suggestions on how to advance "greening" of the campus through communication. The aim of the material produced is threefold: 1) to educate and orient staff, faculty, and students at RRU about sustainability on campus; 2) to encourage participation in areas including energy, transportation, food, waste, water, paper, community involvement, volunteering, and campus ecology; and 3) to provide an introduction to the Moodle platform for students.

2.0 Stakeholders

Each person at RRU is a stakeholder in this project. By increasing communication of sustainability on campus, the staff, faculty, and students will be encouraged to get involved and the institution will be supported in reaching its sustainability goals. The campus community will find it easier to locate information and get involved. Increased participation in current initiatives will result in a "greener" campus for everyone and is expected to result in a higher STARS rating in the future. Additionally, with more involvement, new initiatives may arise. This project engaged stakeholders from each level of the campus community to ensure a representative approach was taken in developing the materials.

3.0 Project Development

This project applied research of other post-secondary institutions in North America and explored unique opportunities for communication at RRU in order to define the most effective method of communicating sustainability on campus. RRU staff and faculty were interviewed to gain perspective on what types of sustainability initiatives occur at the university, and what is important to address in this project.

The formats ultimately chosen for communication were a comprehensive online guide including a condensed and printable version, and an online orientation to educate staff, faculty and students directly. Each deliverable contains similar information, but in a slightly different way in order to reach and engage the diverse audiences at RRU.

3.1 Research and Collaboration

In order to determine the best method for communicating sustainability at RRU, extensive research on other universities and post-secondary institutions, as well as interviews with staff and faculty at RRU, were completed. To allow for the input and opinions of participants in the development of the guide, an ethical review was conducted (Appendix I). The information gathered helped to develop the format, content, and design for the RRU Green Guide and orientation.

The institutions which were chosen for research had all developed guides similar to the project scope for the RRU Green Guide, and the guides were assessed for their accessibility, content, design, and format (Appendix II). In addition to online analysis of these institution's guides, some were also selected to be contacted requesting an interview regarding their communication strategy. Of the twenty-five institutions that were contacted by e-mail, two responded, resulting in one telephone interview, and one reply to interview questions being received by e-mail. Although not a high return on invested effort, there was a significant amount of knowledge gained from these results. It was noted by these contacts that no one communication strategy was superior, and that the format needed to be developed with specific considerations for the type of institution it was designed for. Research also showed that it was difficult to assess the effectiveness of the strategies quantitatively, as there was usually no method in place to do this.

The information obtained from researching other institutions and during interviews with RRU staff and faculty pointed toward two available options for formatting the guide: either an online or a printed version. It was decided that the best option would be to create an online guide with the option for printing. This captures individuals who prefer to have printed material for reference, and those who prefer to have online access. This format has the added benefit of being easily updated to ensure that the information

remains current. Additionally, it became clear that RRU is a unique university with different learning environments, which require special consideration in developing a strategy to communicate sustainability on campus. RRU's focus on distance learning requires that information be presented online to be accessible to the majority of individuals. The audience that the guide and orientation are intended to reach also brought special considerations regarding format: students, as well as faculty and staff, were found to use different online communication platforms, resulting in the need for multiple access points online.

After the format was decided upon, further collaboration with RRU staff and faculty assisted in developing the appropriate content to be communicated within the guide and orientation. The main goal of the guide and orientation is to allow faculty, staff, and students to become aware of, and participate in, the sustainability initiatives at RRU. To facilitate this goal, the content was determined by what is relevant to all audiences on campus, and what individuals can do on campus to help RRU meet their sustainability goals.

3.2 RRU Green Guide

It was decided that the most effective and sustainable method for communication was to utilize the current RRU Sustainability webpage to host the RRU Green Guide. The document could then be viewed electronically, rather than the format of a printed guide that would ultimately be discarded. In addition to the online guide, a condensed version of the information was created as a printable one-page folding booklet.

The Green Guide contains information on seven aspects of sustainability on campus: energy, transportation, waste, water, paper, community and volunteering, as well as campus mapping and ecology. Also included are several links to websites where the reader can find further information to help them achieve their personal sustainability goals, both on and off campus. A guide to sustainability can act as a tool for the campus community; users will be able to refer to the guide for information on the seven aspects included. In conjunction with other reports and information provided on the website, the guide will inform people of what RRU is doing, and what individuals can do to help. The guide, housed on the RRU Sustainability webpage, is available to the entire campus community as well as the public, and can be regularly updated. One of the advantages of this option was that the RRU Sustainability site is already established and active; if someone was looking for information on sustainability at RRU, this is where they would look.

Although there were many advantages to an online format, there were also concerns which were identified during project development. Currently, the Sustainability webpage is known to have little

traffic, which may result in the guide going largely unnoticed by the intended audiences. The format for the guide had potential to be uninteresting to some audiences, and because it is a passive communication method, it might also be overlooked. It is anticipated that through the addition of the printable guide and the online orientation, these barriers will be reduced.

In order to develop a guide that would be visually appealing and in alignment with RRU's vision, the Branding, Marketing and Recruitment (BMR) department was approached to assist in the design aspects of the guide. BMR took on the project because it was also in their interest to publish a document that ties into the RRU brand. The Wildflowers theme, which is being applied throughout the campus, was chosen for the guide so that it shares the visual aspects of RRU's new branding design.

The RRU Green Guide will be available to both the RRU community and the general public through the University's Sustainability website. The Sustainability website can also be available through links on other RRU resources such as Moodle, Roadspiel, and other pages on the main university website. It is expected that the RRU Green Guide will become property of the Office of Sustainability, since they are responsible for the content on the Sustainability website, as well as many of the sustainability initiatives on campus. Under their management, the RRU Green Guide can continue to provide current and useful source of information for staff, faculty, and students.

3.3 Condensed Printable Version of Green Guide

In consultation with BMR, it was determined that providing a fully-printable electronic document may encourage users to print pages unnecessarily. It was proposed that a condensed document would allow individuals to print a guide that highlights important "things you can do" on campus, while also reducing waste. This version would also apply the characteristic Wildflower design used on campus.

The developed format is a folding one-page booklet that is a relatively quick read. It is available for printing on the RRU Green Guide webpage and will not be printed or distributed by the university; this requires the audience to be exposed to the comprehensive guide online before they will notice the printable version.

3.4 Online Orientation

It was decided that a series of fun and interactive quizzes presented in a Moodle course on the RRU Moodle site would expose staff, faculty and students to information about sustainability on campus. Moodle was selected for this purpose because it is an online learning platform that is well-established at RRU, and it can be updated with new content in the future. It was also decided that it would be important

to provide the information in a variety of formats, and so Adobe Flash was selected to portray information in an interactive format that is informative yet fun and easy to use.

The Director for the Center for Teaching and Educational Technologies (CTET) was consulted and confirmed that Flash objects could be embedded in Moodle quizzes. Additionally, experienced CTET staff were dedicated to the project, adding expertise in programming and Moodle course design. The collaboration with CTET was essential to the overall quality of the Moodle course, as these individuals created the Adobe Flash programs that present the data in an appealing format.

The Moodle orientation is available on three servers (learner, continuing education and open learning resources), which will reach a wide range of audiences. It is available to all RRU account holders as a default Moodle course, similar to the RRU Writing Center or Learning Resource Center. Based upon the common use of Moodle, the course is expected to have the most impact on the student body, as many RRU students access the site daily. The course will be available to students before their program commences at RRU, with the goal that the course might also provide an introduction to the Moodle software, which is known to be confusing to many new students.

A limitation of this program is in the interactive animations within each of the quizzes, which were created using Flash software. This introduces an issue for individuals who attempt the quiz using an iPhone or iPad, as this software is not currently compatible with these devices. It is hoped that this will not be a deterrent to completing the course, and individuals will find access from their home computers or a computer on campus, as Flash is a commonly-used program. Flash software is also incompatible with screen readers for the visually impaired. It is hoped that people with visual impairments will be able to complete the orientation with the help of another person. Throughout the initial development of the quizzes there were many difficulties in creating the Flash animations, as software development is not an expertise of any of the group members. Partnerships with CTET ensured that the quiz was developed to a high standard with professionally-developed animations to communicate the information within the quiz. The Moodle course has similar advantages to the comprehensive web-based guide in that it is paperless and easily updated.

The three sections within the Moodle course – waste, transportation, and campus buildings – are designed to be fun and engaging while presenting important information from the comprehensive guide. Each of the Flash objects are designed to display information that can be used to answer questions in the Moodle quiz. Each Moodle quiz was set up so that the first question will always be the embedded Flash object, and the following questions are a random selection of questions, allowing the user to use the Flash object to find information and complete the quiz at the same time.

The first section, the waste section, introduces how to recycle and compost while on campus. This Flash object has a picture of the waste management stations that are being implemented in all buildings at RRU, and a series of icons of waste items to discard. The user can drag and drop these icons into the appropriate bin, and information will be provided across the bottom of the Flash program. When on campus, the participant will see the same stations as presented within the quiz and be able to decide which bin their item should be placed in.

The transportation quiz has a map with areas outlined according to distance from RRU, as well as transportation mode options such as bus, bike, or single-occupant car. The user can select a mode of transportation to see the time required and CO₂ emitted when commuting from the various areas. Likewise, the user can select a region in the Greater Victoria area to see which modes of transportation require the least amount of time, and which create the least amount of CO₂ emissions. This quiz will hopefully allow people commuting to RRU to make a more sustainable choice: to either live closer to the campus, or use a more sustainable mode of transportation. This section has an added benefit of also orientating the participant to Greater Victoria if they are coming from another location.

The quiz for the campus buildings has a bird's-eye picture of the campus core, and each building can be clicked with the mouse to display information regarding sustainability initiatives specific to that particular building. The intention behind this quiz is to inform the reader of current green initiatives going on at RRU, such as the new LEED-certified LIC building, with the underlying purpose of orientating the individual to the campus. This information could also be easily updated in the future if new building features are created.

In addition to being accessible on the main Moodle page as a default course when users are logged in, links to the online orientation are expected to be in several locations within the RRU website: the Sustainability webpage, Roadspiel, and MyRRU. University Life has agreed to take ownership of the online orientation, since they are responsible for student orientations. They will maintain the orientation to ensure that the information is current and that it remains available to all staff, faculty, and students. BMR has also produced presentation materials for University Life that include the sustainability initiatives on campus using the content provided for the RRU Green Guide. This will have the additional benefit of providing a uniform message to new students that will tie in with the RRU Green Guide, one-page printable guide, and Moodle orientation.

3.5 Focus Group

A focus group was held on campus on July 12, 2011 to gather feedback on the Moodle orientation and Comprehensive web-based guide. This date was chosen for the benefit of having several Graduate cohorts on campus during that time, increasing the possible variety of opinions expressed during the focus group. University Life distributed an e-mail to staff, faculty and students with the date and details of the focus group a week prior and supplied coffee. Door prizes were donated by the BSc Program Associate and the ESA Program Coordinator. A contest was held to find a catchy and interesting name for the Moodle course and the prize was donated by the Director of the Office of Sustainability. There were 23 participants in the focus group, which included five staff/faculty, one Professional Communications student, one Bachelor of Commerce student, two Environmental Education and Communication students, and 14 Bachelor of Science students.

At the focus group, a short presentation about the project was given and feedback was obtained from participants through a question/answer period and a written questionnaire. From the feedback obtained it was discovered that nine of the twenty-three participants had visited the RRU Sustainability webpage, confirming the need for multiple communication platforms. It was also noted that there is a currently a barrier to accessing the RRU Sustainability webpage from the RRU website: the link is located at the bottom of the homepage within a large list of other links, which makes it difficult to locate. However, one participant did believe that the RRU Green Guide would help to bring traffic to the Sustainability webpage and make the site more useful.

The Moodle course was the highlight of the focus group, with all 23 participants stating that the quizzes were an informative and interesting form of communication, and that it would be helpful to them to further their knowledge of sustainability on campus. All participants stated that access to the quiz would be beneficial to have prior to starting their studies or work at RRU. It was suggested by a few individuals in the questionnaire that the Moodle course might be more successful as a mandatory requirement before coming to RRU, possibly as part of the application or registration process. A few concerns were raised regarding how the quiz information linked back to the comprehensive guide content. Some recommendations from the questionnaire included: starting a blog, linking the information to a Facebook page, creating an in-person orientation in addition to the online quizzes, and specific to the transportation section, highlighting the shower facilities to help make the decision to cycle easier. Overall, the participants liked that the quiz was easy to use and stated that it would be a successful method for communicating sustainability on campus.

During the question/answer period, some additional comments and suggestions were raised regarding the guides. It was recommended that the link to the Moodle orientation be highly noticeable. However, this may not be possible as it must be aligned with RRU's branding for their current site. It was also suggested that a short description be included in the Moodle course listings to let the reader know what the orientation is for, and to entice them to attempt it. Most of the other comments were related to the transportation section of the quiz, which was helpful as it was still in development at the time of the focus group, allowing for changes to be made prior to its release. The comments included: adding in an area for those living in the Cowichan Bay area; adding links to Jack Bell Rideshare and Google Maps to allow people to find information for carpooling and transit; including values for distance and carbon emissions within the chart for easier readability; and including a comparison of driving times during regular traffic and rush hour, which would entice people to consider alternative modes of transport.

Naming for the comprehensive and printable guide was also addressed in the questionnaire during the focus group. Of the 23 participants the group was almost equally split between the three options of Eco, Green, and Sustainability, with only one individual choosing the Environmental Footprint for their selection. It was communicated that sustainability does not have a definite meaning, and although the guide is intended to increase the sustainability of the campus, it is only in respect to environmental sustainability and does not address all aspects of the triple bottom line. Green was chosen because it is very straightforward in what it is trying to communicate and was considered a "power" term. However, others commented that Green is overused and has also lost its meaning through green-washing. Eco, similarly to green, was chosen for its simplicity and its being easily understood.

Through group discussion, it was decided that Green Guide should be used as the name for the comprehensive and printable guides. The name of the Moodle orientation was determined from a naming contest, which was conducted during the focus group. The winner of the contest was "RRU Green," due to its simplicity which would perhaps draw the reader in; this name was adapted to "RR-U Green?" in order to use a play on words to create the impression that it is actually a quiz that assesses the user's green practices.

4.0 Recommendations

Key recommendations were identified to achieve the following goals: maintain the RRU Campus Green Guide and Moodle orientation, monitor the effectiveness of both media, improve and enhance communication through other means, and address supplementary recommendations identified through project development. These were determined by assessing multiple recommendations using a ranking system of one to five, with one being the least effort and reward, and five being the highest effort and reward (full table of recommendations can be found in Appendix III). This allowed for each recommendation to be weighted for effort versus reward. A final rank was assigned by subtracting the rank for effort from the rank for reward. The table (Appendix III) also identifies who might be the responsible party for implementation or development of the recommendation as well as important advantages and disadvantages of each recommendation.

The key recommendations are as follows:

1. Update and/or modify the RRU Campus Green Guide and Moodle orientation annually to ensure the content remains current. This task could be completed by the Office of Sustainability and University Life with the support of CTET.
2. Ensure all computers on campus have Flash reader software installed so the quiz can be easily accessed from any computer on campus. This task could be completed by IT-Services.
3. Monitor visits, or “hits”, to the Campus Green Guide in order to monitor its effectiveness over time. This task could be completed by the Office of Sustainability with the support of IT-Services.
4. Connect with new cohorts, staff, and faculty at RRU prior to their arrival on campus in order to introduce them to the Moodle site and orientation. This task could be completed by cohort sustainability representatives with the support of the Office of Sustainability.
5. Continue to develop and enhance sustainability communications on campus. This task could be completed through a project by a group in the Professional Communication cohort.
6. Connect campus sustainability to course outlines to get students involved in sustainability at RRU. This task could be completed by faculty of applicable courses with the support of the Office of Sustainability.

5.0 Conclusion

This report addresses the recommendation of the 2010 STARS Report to speak to sustainability issues during new student and employee orientation. After research and careful consideration, it was decided to communicate via two methods: a comprehensive web-based Campus Green Guide with an optional printable one-pager, and an online interactive orientation on Moodle. The Green Guide speaks to seven sustainability themes on campus: transportation, energy, waste, paper, water, and campus ecology, and community and volunteering. It contains extensive information that is available to anyone, and serves as a “go-to” place for information about sustainability at RRU. In addition, the condensed printable PDF provides an alternative format for those who prefer a hard copy of the most useful tips on how to contribute to sustainability at RRU. After meetings with numerous stakeholders, three major themes were chosen for the online Moodle tutorial: buildings and energy, transportation, and waste management. Each of the major themes has a quiz with a specific and underlying purpose, and the orientation serves to introduce new students, faculty, and staff to sustainability on campus. After completion of these two deliverables, the main recommendations to keep this project current and relevant, and useful are as follows: update and/or modify the RRU Campus Green Guide and Moodle orientation annually to ensure the content remains current; ensure all computers on campus have Flash reader software installed so the quiz can be easily accessed from any computer on campus; monitor visits, or “hits”, to the Campus Green Guide in order to monitor its effectiveness over time; Connect with new cohorts, staff, and faculty at RRU prior to their arrival on campus; continue to develop and enhance sustainability communications on campus through a project by a group in the Professional Communication cohort; and connect campus sustainability to course outlines to get students involved in sustainability at RRU.

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Appendix I – Ethical Review Documents

E-MAIL LETTER OF INVITATION

January 25, 2011

Dear _____, **(Name of sustainability director at other university)**

I would like to invite you to be part of a research project that I am conducting. This group project is part of the requirement for a Bachelor of Science in Environmental Science at Royal Roads University. My name is **Andrea Mackintosh** and my credentials with Royal Roads University can be established by calling Tony Boydell, Director of the School of Environment and Sustainability at 250-391-2501, or Mickie Noble, Chair of the Undergraduate Committee at 250-391-2540.

The objective of our research project is to gather the campus community's awareness and perspectives on current RRU initiatives and the applicability of a campus "green guide" and website addition. Our project is sponsored by Dr. Steve Grundy, Associate VP. In addition to submitting our final report to Royal Roads University in partial fulfillment for a Bachelor of Science in Environmental Science, we will also be sharing our research findings with Dr. Grundy. The research data will be used to produce a report as well as a campus "green guide" that will be available to everyone on campus and web material that will be available to distance students as well.

Our research project will consist of open-ended interview questions. An interview is foreseen to last approximately 15 to 30 minutes. The foreseen questions will include:

1. What communication methods do you have in place for your sustainability initiatives on campus?
2. Have you tried other methods that didn't work prior to the successful ones you have in place now?
3. Why did you choose the methods you have in place?
4. Have you noticed an increased awareness since the communications were put in place?
 - a. (Such as student based campus initiatives, or anything else)
5. Are you monitoring the effectiveness of your communications?
6. Are you planning on implementing any additional forms of communication?
 - a. If so, why?
7. Are there certain aspects of the communication method that have been more successful than others?

Your name was chosen as a prospective participant because of your current position as sustainability director at _____ (**name of institution**).

Information will be recorded in hand-written and possibly audio-recorded format and, where appropriate, summarized in anonymous format in the body of the final deliverables. At no time will any specific comments be attributed to any individual unless your specific agreement has been obtained beforehand. All documentation will be kept strictly confidential.

Upon completion of the project, the raw data will be retained for as long as our department needs it as a basis for the green guide. The retention period is indefinite, but when the data is no longer needed it will be destroyed. If you choose to withdraw from the project at any time, we will not retain any of the information you have provided to us; it will be destroyed immediately.

A copy of the final report will be published and archived in the RRU Library.

Please feel free to contact me at any time should you have additional questions regarding the project and its outcomes.

You are not obligated to participate in this research project. If you do choose to participate, you are free to withdraw at any time without prejudice. Similarly, if you choose not to participate in this research project, this information will also be maintained in confidence.

If you would like to participate in our research project, please contact me at:

E-mail: **andrea.mackintosh@royalroads.ca**

Telephone: _____

Sincerely,

Andrea Mackintosh

E-MAIL LETTER OF INVITATION

January 25, 2011

Dear _____, (**Name of faculty or staff member at RRU**)

I would like to invite you to be part of a research project that I am conducting. This group project is part of the requirement for a Bachelor of Science in Environmental Science at Royal Roads University. My name is **Andrea Mackintosh** and my credentials with Royal Roads University can be established by calling Tony Boydell, Director of the School of Environment and Sustainability at 250-391-2501, or Mickie Noble, Chair of the Undergraduate Committee at 250-391-2540.

The objective of our research project is to gather the campus community's awareness and perspectives on current RRU initiatives and the applicability of a campus "green guide" and website addition. Our project is sponsored by Dr. Steve Grundy, Associate VP. In addition to submitting our final report to Royal Roads University in partial fulfillment for a Bachelor of Science in Environmental Science, we will also be sharing our research findings with Dr. Grundy. The research data will be used to produce a report as well as a campus "green guide" that will be available to everyone on campus and web material that will be available to distance students as well.

Our research project will consist of open-ended interview questions. An interview is foreseen to last approximately 15 to 30 minutes. The foreseen questions will include:

1. What do you think would make the RRU green guide the most successful?
2. What are some important points that we should highlight in the RRU green guide?
3. How can we connect with other students or staff at RRU?
4. What is the history of the sustainability initiative at RRU?
5. In your department, what is being done regarding campus sustainability?
6. What is the most sustainable or innovative thing that RRU is doing currently?
7. How could students and staff improve sustainability at RRU?

Your name was chosen as a prospective participant because of your current position as _____ (**position name**) at Royal Roads University.

Information will be recorded in hand-written and possibly audio-recorded format and, where appropriate, summarized in anonymous format in the body of the final deliverables. At no time will any specific

comments be attributed to any individual unless your specific agreement has been obtained beforehand. All documentation will be kept strictly confidential.

Upon completion of the project, the raw data will be retained for as long as our department needs it as a basis for the green guide. The retention period is indefinite, but when the data is no longer needed it will be destroyed. If you choose to withdraw from the project at any time, we will not retain any of the information you have provided to us; it will be destroyed immediately.

A copy of the final report will be published and archived in the RRU Library.

Please feel free to contact me at any time should you have additional questions regarding the project and its outcomes.

You are not obligated to participate in this research project. If you do choose to participate, you are free to withdraw at any time without prejudice. Similarly, if you choose not to participate in this research project, this information will also be maintained in confidence.

If you would like to participate in our research project, please contact me at:

E-mail: **andrea.mackintosh@royalroads.ca**

Telephone: _____

Sincerely,

Andrea Mackintosh

TELEPHONE SCRIPT

(Other Universities)

Hello, my name is **Naomi Harder**, and I am conducting a research project which is part of the requirements for a Bachelor of Environmental Science degree at Royal Roads University, in Victoria, British Columbia, Canada.

As part of a major group project course in the program, the objective of our research project is to research new communication outlets to promote sustainability on campus at Royal Roads. Our credentials with Royal Roads University can be established by telephoning Mickie Noble, Chair of the Undergraduate committee, School of Environment and Sustainability, at 250-391-2540.

In addition to submitting a final report and presentation on our findings we will also be producing a campus green guide to be available to the campus community. We will also be looking at enhancing the RRU sustainability webpage with the addition of the guide and other possible web material.

Our research project will consist of a telephone interview or, if you prefer, a set of open-ended questions by e-mail. The interview is foreseen to last 15 to 30 minutes. The following list is a general example of the questions we will be asking:

8. What communication methods do you have in place for your sustainability initiatives on campus?
9. Have you tried other methods that didn't work prior to the successful ones you have in place now?
10. Why did you choose the methods you have in place?
11. Have you noticed an increased awareness once the communications were put in place?
 - a. (Such as student based campus initiatives or anything else)
12. Are you monitoring the effectiveness of your communications?
13. Are you planning on bringing in additional forms of communication?
14. Are there certain aspects of the communication method that have been more successful than others?

We chose you as a prospective participant because of your current status as **sustainability director** at **Name of University**.

The information we gather from you will be recorded in hand-written or audio format (if applicable) and, where appropriate, summarized in anonymous format in the body of the final report. At no time will any specific comments be attributed to any participant unless specific agreement has been obtained beforehand. All documentation will be kept strictly confidential.

A copy of the final report will be published and archived in the RRU Library and the green guide/webpage will be available to the RRU campus community indefinitely.

Our raw data will be retained for as long as our department needs it as a basis for the green guide. The retention period is indefinite but when the data is no longer needed it will be destroyed. Also, if you choose to withdraw from the process we will not retain any of the material gathered, destroying it immediately.

You are not obligated to participate in this research project. If you choose not to participate, you are free to withdraw at any time without prejudice. Similarly, if you choose not to participate in this research project, this information will also be maintained in confidence.

Would you be interested in participating in the project?

Your reply is your agreement to participate. As you are located far from RRU we are unable to have you sign a research consent form. We will e-mail you a copy for your records.

Interviewer training:

- Interviewers will go through a scenario based exercise with team members prior to the interview to be able to appropriately answer respondent's questions.

RESEARCH CONSENT FORM

We are BANKS Technology and this research project is part of the requirement for a Bachelor of Environmental Science Degree at Royal Roads University. Our credentials with Royal Roads University can be established by telephoning Mickie Noble, Chair of the Undergraduate committee, School of Environment and Sustainability, at 250-391-2540.

This document constitutes an agreement to participate in our research project, the objective of which is to develop new communication outlets to promote campus sustainability initiatives. This goal will be achieved through the creation of a campus green guide and/or new web material for the RRU website.

The research will consist of open-ended interviews in person or by phone (interview questions can be answered via e-mail if preferred). The interview is foreseen to last 15 to 30 minutes. The foreseen questions will refer to personal ideas, preferences and opinions on sustainability initiatives on campus. In addition to submitting a final report and presentation to Royal Roads University in partial fulfillment for a Bachelor of Environmental Science Degree, we will also be sharing our research findings in the form of a guide to sustainability and/or a RRU website addition.

Information will be recorded in hand-written format or audio taped (if applicable) and photographs (if applicable) may be taken if agreed upon by both parties. The information, where appropriate, will be summarized in anonymous format in the body of the final report and/or in the green guide and /or on the website. At no time will any specific comments be attributed to any individual unless specific agreement has been obtained beforehand. All documentation will be kept strictly confidential. A copy of the final report will be published and archived in the RRU Library and the green guide/webpage will be available to the RRU campus community indefinitely.

Our raw data will be retained for as long as our department needs it as a basis for the green guide. The retention period is indefinite but when the data is no longer needed it will be destroyed. Also, if you choose to withdraw from the process we will not retain any of the material gathered, destroying it immediately.

You are not obligated to participate in this research project. If you choose not to participate, you are free to withdraw at any time without prejudice. Similarly, if you choose not to participate in this research project, this information will also be maintained in confidence.

By signing this letter, you give free and informed consent to participate in this project.

Name: (Please Print): _____

Signed: _____

Date: _____

IN-PERSON INTERVIEW FOR OFF-CAMPUS STUDENTS DURING RESIDENCY

Sample Questions:

1. Do you know that RRU has a sustainability department? Webpage?
2. Would you participate in a sustainability tour of the campus? Or would self-guided be better?
3. Would you be interested in participating in a “carpooling classified” section on the RRU website?
Did you know about it?
4. How do you think we could best communicate sustainability at RRU? – green guide booklet, mandatory orientation package on Moodle, optional self-guided tour, web material, etc? Any ideas?
5. Would it be better to communicate to you about sustainability before you arrive on campus or when you arrive?
6. Would you be interested in receiving updates about sustainable practices at RRU?

Appendix II – Universities Researched, Contacted, and Interviewed

The following table outlines the universities/educational institutions researched and record of communication used, which occurred during the research component of the project.

| Universities Researched | Contacted via E-mail | Received Reply | Conducted Phone Interview |
|--|----------------------|----------------|---------------------------|
| Arizona State University | X | | |
| Athabasca | | | |
| British Columbia Institute of Technology | X | X | X |
| Camosun College | | | |
| Carleton University | X | | |
| Concordia | X | | |
| Dalhousie University | | | |
| Fanshawe College | X | | |
| Kwantlen Polytechnic | X | | |
| McGill University | X | | |
| McMaster University | X | | |
| Mohawk College | X | | |
| Mount Alison University | X | | |
| Northern Alberta Institute of Technology | | | |
| Nova Scotia Community College | X | | |
| Ontario College of Art & Design | X | | |
| Queens University | X | | |
| Ryerson University | X | | |
| Simon Fraser University | X | | |
| Stanford University | | | |
| Trent University | X | | |
| Thompson Rivers University | X | | |
| University of Alberta | | | |
| University of Calgary | X | | |
| University of British Columbia | X | | |
| University of British Columbia-Okanagan | X | | |
| University of Manitoba | X | | |
| University of Ottawa | X | | |
| University of Western Ontario | X | | |
| University of Windsor | X | | |
| University of Victoria | X | X | |
| University of Waterloo | | | |
| Upper Canada College | | | |

Appendix III – Recommendations

The recommendations below highlight areas where communication of sustainability at Royal Roads University should be maintained, improved or enhanced. Effort and reward for each recommendation are ranked on a scale of one to five, one being the lowest effort or reward, and five being the highest effort or reward. Departments/persons that may be responsible for developing and/or implementing the recommendation are also listed. Key recommendations for each section are identified by the highest final rank (determined by the reward minus the effort).

| # | Recommendation | Effort 1-5 | Reward 1-5 | Development Implementation | Final Rank |
|--|---|---------------|---------------|--|---------------|
| Section 1. Maintenance of the Campus Green Guide housed on the RRU Sustainability Website | | | | | |
| 1 | Create a feedback page for users of the Green Guide to provide opinions, ideas, questions, and concerns. <i>PRO: Allows for direct opinions, suggestions and ideas for improvement of Green Guide.</i> <i>CON: May be unresponsive. Requires monitoring of platform.</i> | 2 | 3 | <ul style="list-style-type: none"> Office of Sustainability | 1 |
| 2 | Develop an illustrative, printable campus map which promotes/highlights green activities (bike racks, showers, walking paths, recycling centers, etc.) <i>PRO: Current maps are monotone and focus on parking so this will create a more green-oriented, friendly, and helpful map for the RRU community.</i> <i>CON: Design project may require outsourcing. Possibly high cost.</i> | 4 | 4 | <ul style="list-style-type: none"> Office of Sustainability Royal Roads University | 0 |
| 3 | Update and/or modify the Green Guide annually. <i>PRO: Will ensure guide stays current.</i> <i>CON: Difficult to ensure that updating occurs since this was a student-driven project.</i> | 3 | 5 | <ul style="list-style-type: none"> Office of Sustainability | 2 |

Recommendations continued ...

(Continued...) Key recommendations for each section are identified by the highest final rank (determined by the reward minus the effort).

| # | Recommendation | Effort 1-5 | Reward 1-5 | Development Implementation | Final Rank |
|--|--|---------------|---------------|--|---------------|
| Section 2. Maintenance of the RR-U Green? Moodle Orientation housed on the Moodle Default Courses | | | | | |
| 4 | <p>Ensure all computers on campus have Flash Reader software updated and available.</p> <p><i>PRO: Will enable people on campus to take part in the orientation and view the animations in the quiz.</i> <i>CON: Some computers do not have the updates installed to allow for compatibility with the animations on the Moodle quiz. This may be an IT maintenance issue and so would require IT assistance.</i></p> | 1 | 4 | <ul style="list-style-type: none"> IT-Services University Life | 3 |
| 5 | <p>Add/update question database in the Moodle quiz.</p> <p><i>PRO: Enables users to try the quiz multiple times with different questions, increases interesting factor.</i> <i>CON: Limited to the existing three themes designed which have limited question options. If all new content was desired it would require more effort.</i></p> | 1 | 2 | <ul style="list-style-type: none"> University Life CTET | 1 |
| 6 | <p>Add outlying communities (e.g. Highlands) to the travel portion of the Moodle quiz.</p> <p><i>PRO: Addresses recommendations made to BANKS Technology. Will include more people.</i> <i>CON: Map may not adjust well to this addition, creating a confusing and messy animation.</i></p> | 1 | 1 | <ul style="list-style-type: none"> University Life CTET | 0 |
| 7 | <p>Update and/or modify the orientation annually.</p> <p><i>PRO: Will ensure orientation stays current.</i> <i>CON: Difficult to ensure that updating occurs since this was a student-driven project.</i></p> | 3 | 5 | <ul style="list-style-type: none"> University Life CTET | 2 |

Recommendations continued ...

(Continued...) Key recommendations for each section are identified by the highest final rank (determined by the reward minus the effort).

| # | Recommendation | Effort 1-5 | Reward 1-5 | Development Implementation | Final Rank |
|--|--|---------------|---------------|---|---------------|
| 8 | Create an iPhone application to allow the Moodle orientation to be compatible with iPhones and iPads. <i>PRO: Would increase the application of the orientation to iPhone and iPad users.</i> <i>CON: Does not cater to the majority. Might have to be outsourced.</i> | 5 | 3 | <ul style="list-style-type: none"> Possibly Outsourced Student project | -2 |
| 9 | Include an aerial picture of the campus core including the LIC building into the campus buildings quiz. <i>PRO: Increases the professional display of the animation.</i> <i>CON: May be high cost to attain the aerial photo required to match other building perspectives.</i> | 3 | 4 | <ul style="list-style-type: none"> Office of Sustainability Royal Roads University | 1 |
| Section 3. Monitor effectiveness of the Campus Green Guide and RR-U Green? Moodle Orientation | | | | | |
| 10 | Conduct a follow-up STARS report in 2013. <i>PRO: A direct comparison can help RRU identify the success of this project and areas still requiring work.</i> <i>CON: The communication portion of the STARS report was small so may not result in significant difference in overall rating.</i> | 4 | 3 | <ul style="list-style-type: none"> Royal Roads University Student project | -1 |
| 11 | Monitor visits to the campus green guide. <i>PRO: Provides qualitative value for assessment.</i> <i>CON: No reference or baseline for comparison.</i> | 1 | 4 | <ul style="list-style-type: none"> Office of Sustainability IT - Services | 3 |
| 12 | Monitor participation in the Moodle orientation quiz. <i>PRO: Provides qualitative value for assessment.</i> <i>CON: No reference or baseline for comparison.</i> | 1 | 3 | <ul style="list-style-type: none"> Office of Sustainability University Life CTET | 2 |
| 13 | Conduct campus surveys/questionnaires to determine effectiveness of the Green Guide and Moodle orientation. <i>PRO: Provides qualitative information on the effectiveness of the communication strategies. Can be used to make changes.</i> <i>CON: May have low response.</i> | 3 | 4 | <ul style="list-style-type: none"> Office of Sustainability University Life | 1 |

Recommendations continued ...

(Continued...) Key recommendations for each section are identified by the highest final rank (determined by the reward minus the effort).

| # | Recommendation | Effort 1-5 | Reward 1-5 | Development Implementation | Final Rank |
|--|--|---------------|---------------|--|---------------|
| Section 4. Improve and enhance communication of sustainability/green initiatives at RRU | | | | | |
| 14 | <p>Improve/maintain the RRU online classifieds sections for carpooling, housing, buying and selling used items, etc.</p> <p><i>PRO: Enhance community involvement. Provides a central place for the RRU community.</i> <i>CON: May not have high response. Would require monitoring.</i></p> | 2 | 3 | <ul style="list-style-type: none"> Office of Sustainability | 1 |
| 15 | <p>Create an online photo or video campus tour highlighting sustainable points of interest.</p> <p><i>PRO: Fun, creative activity engages various levels of the RRU community. Provides a "green" look at the campus to prospective students, staff, and faculty.</i> <i>CON: May require high effort.</i></p> | 4 | 5 | <ul style="list-style-type: none"> Possibly Outsourced Student project University Life | 1 |
| 16 | <p>Create a twitter account for sustainability.</p> <p><i>PRO: Allows for immediate news and updates. Keeps up with current social media.</i> <i>CON: May need to be monitored. Can become out dated with new tools.</i></p> | 2 | 2 | <ul style="list-style-type: none"> Office of Sustainability | 0 |
| 17 | <p>Champion "green" individuals on campus.</p> <p><i>PRO: Gives specific recognition to individuals. Provides incentive.</i> <i>CON: Would require coordination to cover all departments. Some may not want to be publicized.</i></p> | 3 | 3 | <ul style="list-style-type: none"> Office of Sustainability Other program departments | 0 |
| 18 | <p>Improve sustainability discussion forum and/or create a blog.</p> <p><i>PRO: Could apply a pilot project to see if effective. Interactive, idea sharing platform.</i> <i>CON: Difficult to get people involved. Will require monitoring.</i></p> | 3 | 2 | <ul style="list-style-type: none"> Office of Sustainability Sustainability representative from current student cohort | -1 |
| 19 | <p>Conduct campus tours which highlight environmental sustainability (veteran trees, solar panels, wetland restoration, composting, LEED building, community garden, etc.)</p> <p><i>PRO: Orients newcomers to the area. Brings appreciation for the environment. Meet people.</i> <i>CON: Coordination and consistency could be difficult. Different start dates for cohorts and indefinite staffing etc.</i></p> | 4 | 5 | <ul style="list-style-type: none"> University life Office of Sustainability Human resources for staff and faculty | 1 |

Recommendations continued ...

(Continued...) Key recommendations for each section are identified by the highest final rank

(determined by the reward minus the effort).

| # | Recommendation | Effort 1-5 | Reward 1-5 | Development Implementation | Final Rank |
|----|---|---------------|---------------|---|---------------|
| 20 | <p>Connect with new cohorts, staff and faculty (on sustainability at RRU) prior to their arrival on campus.</p> <p><i>PRO: Allows for direct contact to be made between prior cohorts and new cohorts.</i> <i>CON: Coordination and consistency could be difficult. Different start dates for cohorts and indefinite staffing etc.</i></p> | 1 | 4 | <ul style="list-style-type: none"> • Prior cohort Sustainability representative • Office of Sustainability | 3 |
| 21 | <p>Promote the Green Guide and Moodle orientation on Roadspiel. Include a link for each near the Green Tips section.</p> <p><i>PRO: Targets staff and faculty. Could include specific information for departments.</i> <i>CON: Voluntary participation</i></p> | 2 | 4 | <ul style="list-style-type: none"> • Office of Sustainability • Employee communications department | 2 |
| 22 | <p>Promote Green Guide and Moodle orientation at Castle Coffee event (e.g. display).</p> <p><i>PRO: Targets staff and faculty. Could develop positive discussion.</i> <i>CON: Voluntary participation</i></p> | 3 | 3 | <ul style="list-style-type: none"> • Office of Sustainability | 0 |
| 23 | <p>Promote Green Guide and Moodle orientation at town hall quarterly meetings.</p> <p><i>PRO: Targets staff and faculty. High attendance at events. Could be displayed on screen until meeting starts.</i> <i>CON: Voluntary participation</i></p> | 3 | 2 | <ul style="list-style-type: none"> • Office of Sustainability | -1 |
| 24 | <p>Include short presentation (same powerpoint slides in student orientation) into staff orientation.</p> <p><i>PRO: Currently being revamped. Will have monthly sessions so great reminder.</i> <i>CON: May make orientation too long</i></p> | 2 | 4 | <ul style="list-style-type: none"> • Human Resources • Office of Sustainability | 2 |
| 26 | <p>Advertise key information from Green Guide on campus televisions (e.g. develop RRU station) & Habitat café (e.g. stamps on take out boxes) & library (e.g. bookmarks)</p> <p><i>PRO: High message output. Builds on existing resources.</i> <i>CON: Possible conflict with others who are interested in displaying information. Would require high effort.</i></p> | 5 | 5 | <ul style="list-style-type: none"> • Office of Sustainability • Habitat Café • Library staff • Royal Roads University | 0 |

Recommendations continued ...

(Continued...) Key recommendations for each section are identified by the highest final rank (determined by the reward minus the effort).

| # | Recommendation | Effort 1-5 | Reward 1-5 | Development Implementation | Final Rank |
|----|--|---------------|---------------|---|---------------|
| 27 | Develop media (Posters, signs, stickers) to recognize activities on campus which resulted in significant effect (e.g. Thanks to you! cyclist/composter/recycler...because of people like you the campus has this wonderful bike rack/shower/U-Pass, etc.) <i>PRO: Recognizes actions and how they effect change. Positive and engaging and encouraging.</i> <i>CON: Would have to fit with RRU image if permanent.</i> | 3 | 4 | <ul style="list-style-type: none"> Office of Sustainability University Life Student project | 1 |
| 28 | Develop media (Posters, signs, stickers) with an eye-catching tag line (e.g. "For More! Visit the RRU Green Guide"). Place at common areas such as bike racks, in washrooms, by microwaves etc. <i>PRO: Encourages interest in visiting the sustainability site.</i> <i>CON: Would have to fit with RRU image if permanent.</i> | 3 | 4 | <ul style="list-style-type: none"> Office of Sustainability Marketing Branding | 1 |
| 29 | Announce a weekly green tip on MyRRU with a link to the Green Guide. <i>PRO: Already a current grassroots initiative on Roadspiel so could become a joint effort. Fun, interesting, encourages multiple visits.</i> <i>CON: Maintenance and updating.</i> | 4 | 4 | <ul style="list-style-type: none"> Office of Sustainability Student sustainability representative | 0 |
| 30 | Employ a Professional Communications cohort to devise media to promote campus sustainability, the sustainability site and Green Guide. <i>PRO: Can build on the Green Guide and Moodle orientation. Develop media to reach more people. Add to interest and awareness.</i> <i>CON: Willingness of instructor. Might be perceived as a science project.</i> | 3 | 5 | <ul style="list-style-type: none"> Office of Sustainability Liaison with Rick Kool. Professional Communications Department | 2 |

Recommendations continued ...

(Continued...) Key recommendations for each section are identified by the highest final rank (determined by the reward minus the effort).

| # | Recommendation | Effort 1-5 | Reward 1-5 | Development Implementation | Final Rank |
|---|---|---------------|---------------|--|---------------|
| Section 5. Supplementary recommendations | | | | | |
| 32 | Organize a campus cycling club. <i>PRO: Increase cycling, help RRU address sustainable transportation goals.</i> <i>CON: New cyclists may not feel welcome</i> | 1 | 3 | <ul style="list-style-type: none"> Office of Sustainability Volunteer cycling enthusiast | 2 |
| 33 | Increase staff in the Office of Sustainability <i>PRO: Help RRU meet sustainability goals. Increase campus green initiatives. Increase RRU visibility in the community as it reaches more targets.</i> <i>CON: Lack of resources (funding)</i> | 4 | 5 | <ul style="list-style-type: none"> Office of Sustainability Royal Roads University | 1 |
| 34 | Increase campus activities during Earth Day/Environment week. Have a campus sustainability booth at community events. <i>PRO: More community engagement. Lead by example. Increase RRU visibility in the community.</i> <i>CON: Coordination and resources required.</i> | 3 | 4 | <ul style="list-style-type: none"> Office of Sustainability Student sustainability representatives | 1 |
| 35 | Connect campus sustainability to course outlines and assignments (e.g., video assignments in BSc-ES sustainability class could cover campus initiatives). Videos could become a part of the RRU website to display sustainability. <i>PRO: Exposes learners to localized situations.</i> <i>CON: Requires course time. Needs approval from program heads.</i> | 1 | 4 | <ul style="list-style-type: none"> Office of Sustainability Program departments | 3 |