UBC Social Ecological Economic Development Studies (SEEDS) Student Report

Interactive Map of the UBC Food System Alice Feng, Kelsey Hilton, Shelby McLeod, Aireen Su and Nathan Wong Scenario 6 University of British Columbia LFS 450 April 3rd, 2013

Disclaimer: "UBC SEEDS provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student project/report and is not an official document of UBC. Furthermore readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Coordinator about the current status of the subject matter of a project/report".

Table of Contents

Abstract	3
Introduction	4
Group Reflection of UBCFSP Vision Statement	6
Group value assumptions	7
Methodology	7
Findings and Outcomes	12
Discussion	16
Stakeholder Recommendations	20
Scenario Evaluation	
Reflection on successes and challenges	24
Media Release	26
References	28
Appendices	30

Abstract

In the face of current environmental challenges, it is imperative to change our consumption behaviors and attitudes towards an ecologically compatible approach. Through purchases and resource consumption, consumers can have a variety of indirect and direct effects on the environment. Informing consumers of the availability and accessibility of green products in their community encourages green consumerism. While UBC aims to be a global leader in sustainability, it currently lacks a map outlining sustainable food initiatives available on campus. To fill this knowledge gap, we developed the designs and concepts for an online interactive UBC sustainable food system and to conceive the designs and concepts for a visually engaging, functional, interactive map.

To achieve our stated goals, we conducted extensive literature reviews, qualitative observations and key informant interviews to develop our map design and concepts, learn cartography principles as well as determine the map's essential components. Through our research we found a number of interactive food system maps from other North American universities and drew from those examples to design our ideal map. The *UBC Sustainable Food Guide* (2011) helped us identify sustainable food outlets on campus. From the original list of outlets described in the guide, we improved upon their outlet descriptions and made new additions. Ultimately, we recommended the use of OpenStreet map (2013) as the base for the interactive map as well as the use of layers, and universally recognized icons to describe the variety of sustainable initiatives available. Key recommendations for stakeholders include methods for ensuring the reliability of the map, promoting it, as well

as the possibility for future expansion. Further implications of the significance of the map are also discussed.

Introduction

Industrialization, development and urbanization has depleted and exhausted much of the earth's natural resources and increasingly there are signs that earth cannot support our current rate of consumption (Cohen, 1995). Human activities since the Industrial Revolution have forever changed the global climate and landscape- arguably for the worse. Global atmospheric concentrations of greenhouse gasses (carbon dioxide, methane and nitrous oxide) now far exceed pre-industrial values and are contributing to the warming of the climate (Solomon, 2007). Land-use change as well as fossil fuel use was responsible for the majority of the increases in global carbon dioxide concentration while agriculture was the primary instigator for methane and nitrous oxide. With global warming, we expect extreme weather events to occur at a greater frequency and with increased intensity, the total land area to shrink due to rising sea levels, and less productive ecosystems (both terrestrial and aquatic) (Helmer & Hilhorst, 2006; Solomon, 2007; Walter et al., 2002). The Food and Agricultural Organization of the United Nations (FAO, 2000) estimated that ecosystems in most areas where fisheries can develop are close to full exploitation. Another analysis has concluded that overexploitation and overfishing has led to the loss of over 90% of predatory fishes from global oceans (Myers & Worm, 2003). Additionally, almost 40% of the agricultural land has been affected by human-induced soil degradation, and more than 6% of agricultural lands are degraded to such an extent that restoration of soil productivity is not possible without major capital

investments (Oldeman, 1994). In the face of dwindling resources and drastic changes on our planet, how can we hope to adapt and possibly overturn the tide into a brighter, greener, and more productive future for future generations? Changing our attitudes and consumption behaviors towards the environment can be a starting point.

Increasingly, North American consumers are becoming more aware of their direct and indirect impacts on their environment through their consumption of energy and water as well as their purchases of household items (Laroche et al., 2001; Roberts & Bacon, 1997). Consumers have responded to the warnings of climate change and unsustainable production practices by supporting and purchasing ecologically compatible products. Increasingly, more individuals are willing to pay more for environmentally friendly products (Laroche et al., 2001). Such efforts and contributions have shifted the marketplace into an environmentally conscious mindset. The change in purchasing behavior reveals a paradigmatic shift in the orientation of North American consumers towards the environment from a strong anthropocentric tradition where humans are immune to ecological constraints and consequences (Roberts & Bacon, 1997). One could argue, therefore, that it is imperative to provide consumers with relevant and up-to-date information on the availability of green products and initiatives in their community to encourage green consumer behavior.

The University of British Columbia (UBC), while being a veritable leader in endorsing sustainable practices and research, is constantly finding new ways to engage students, visitors, faculty and staff in sustainable initiatives. Presently, there is no easily accessible and comprehensive map of the UBC Campus Food system. Our group addressed this issue by laying down the foundations for a comprehensive interactive food

system map that highlights the sustainable food initiatives present on the UBC campus. Maps excel in communicating spatial knowledge and use a visually engaging and understandable medium that can communicate across cultural, religious and linguistic boundaries. An interactive food systems map will not only encourage engagement of the sustainable aspects of the UBC food system by UBC students, faculty, staff and visitors, but also bring awareness to where there is a lack sustainability initiatives.

Our purpose in this project was two-fold:

- To identify the essential components of an interactive map of sustainable resources within the UBC food system
- To develop designs and concepts for visually engaging, functional, easy-touse interactive food systems map for UBC

Group Reflections of UBCFSP's Vision Statement

While in general we agreed with the vision that the UBC Food System Project (UBCFSP, 2013) has set forth for itself, some of us had doubts whether all the goals outlined in the UBCFSP Vision Statement were reasonable and achievable. In particular, we had doubts about whether UBC can achieve zero waste. Unless all our suppliers can package their items using recyclable or compostable containers, we will still generate waste. In addition, franchises present on the campus are an equally important part of the UBC community fabric. Even if we can achieve zero-waste in all UBC Food and AMS outlets and initiatives, UBC will not be completely zero-waste until all franchise and private parties make the same commitment. We also identified that some culturally appropriate foods werere heavily processed and cannot be locally sourced. This led us to

wonder whether a sustainable diet in the Greater Vancouver area can encompass the culinary traditions of all ethnic groups. Nevertheless, on the whole we would love to see each of the statements on UBCFSP's Utopian Food System come to fruition and wish to contribute to its reality.

Group value assumptions

As all members of our groups are students from the Faculty of Land and Food systems, we are knowledgeable about current environmental challenges and strive to be informed consumers that make ethically and morally sound sustainable choices where possible in our lives. We all believe that issues concerning the environment should be prioritized while realizing that the issues are diverse in nature. We realize that true sustainability cannot be reached without finding an appropriate balance between the three spheres of sustainability: environmental (e.g. resource management and environmental protection), social (e.g. social, justice, human rights and equal opportunity), and economic (e.g. cost savings, economic growth, and profit). We support the notion of locally-sourced, ethically and organically produced food while understanding that such food items may not be accessible or affordable for all people. However, we believe that everyone can do their own small part to choose a more sustainable diet that is lighter on the earth's environment, and that the sum of individual actions is significant.

Methodology

We based our project around Community Based Action Research (CBAR), a participatory research method defined as an "inquiry or investigation that provides people

with the means to take systematic action to resolve specific problems" (Baker-French & Richer, 2011). The primary goal of CBAR is to solve local problems by utilizing locally generated knowledge and actions (Rojas et al., 2007). Methods of data collection that were used throughout the project's duration include: conducting literature reviews, secondary sources, interview, and engaging in participant observation. Data collection took place on UBC campus and mostly through the Internet, from mid-January to mid-March, 2013.

The process of answering our research questions could be divided into three main stages: understanding, envisioning, and development. The initial steps of the project included understanding the background and expectations of the project. We started by looking at scenario description and talking to our course instructor, Sophia Baker-French, and our teaching assistant, Josh Edwards, to ensure that our expectation and vision of the project are in accordance with theirs. Thereafter, we conducted literature review to contextualize the subject of interactive mapping. To help us understand the importance of interactive maps, we read a wide variety of peer-reviewed literature obtained from Google Scholar and UBC Library on various topics about interactive mapping. Some of the key words we used in researching relevant journal articles include: interactive map, food systems map, and user-friendly map.

Our group also looked into various design principles behind the development of interactive maps. Since our project initially involved using Geographic Information Systems (GIS), we conducted a key informant interview with the UBC GIS librarian, Tom Brittnacher, to understand the scope and applicability of GIS to our project. Another primary goal at this stage of the project was to ensure that we were building upon past

project resources available to us, not repeating them. Therefore, we reviewed previous student work from 2012 available on the SEEDS Library. UBC campus maps of edible food places and sustainability programs created by previous geography students helped us to identify the appropriate components of the UBC Food System to include and exclude on the map (Bartley, 2008; Cullum, Gunther & Ristaniemi, 2006). We also reviewed the components and features that were included in the UBC Sustainable Campus Food Guide (2011). The University of British Columbia Food System Project (UBCFSP), a collaborative project between the Faculty of Land & Food Systems and Campus Sustainability's SEED program, recently launched UBC's first food guide, the UBC Sustainable Campus Food Guide. The guide promotes sustainable initiatives and opportunities available on campus while encouraging community participation in green consumerism. This guide was used because it thoroughly addressed sustainability a UBCspecific the food system. We utilized all of the food outlets mentioned in this guide, adding additional description to some as well as including outlets not currently in the guide. In combining what was useful to our map from past projects we compiled the information into an accessible, interactive and user-friendly format.

In the next stage, we began to envision our ideal interactive map that could effectively and accurately reflect the sustainable aspects of UBC food systems and the values of the project team and community stakeholders. Establishment of criterions for determining sustainable behavior was crucial to our selection process of food initiatives. We referred to the definition of sustainability provided by the *UBC Sustainable Campus Food Guide*, and decided that any food initiatives that met two or more of the criteria that the guide had included (e.g. ocean wise, compost, local...etc.) would be included on the

map. We did not make the requirements extremely stringent because we wanted to ensure the map is not so exclusive that it would deter other outlets from participating in sustainable initiatives. In addition to providing a map that reflects the UBC food systems, we wanted to create a map that engages people of different interests, taste preferences and cultural backgrounds. To help us envision an engaging interactive map, we searched the Internet for examples of food systems maps that were visually attractive and functional. Color use, detail of routes and buildings and clarity of font choice were the key criteria we used in determining our ideal base map. In terms of the functionality of a map, we considered factors such as arrangement of icons and layers, display of images and relevancy of displayed information.

Since our project did not require us to create an actual map, the next stage of development involved determining a way to effectively represent the information that we gathered and showcase our vision of a sustainable UBC food system interactive map. We applied for an AMS Sustainability grant of \$2500.00 on February 26th, 2013 by filling out the online application form (http://amssustainability.ca/submit/) as a group in one sitting. This grant will be used to pay a graphic designer to create an official UBC Sustainable Food System map based on the vision we lay out in this report. To ensure that the future graphic designer understands our vision, we put together a reference package (see Appendix V) that includes information for each food outlet, a screenshot of a map that best represents our vision and components and features that we would like the map to include. After deciding what food outlets to be included into the map, we either used the exact descriptions found in the aforementioned food guide, updated descriptions in the guide or created new descriptions for outlets not in the guide, based on the food outlet's

online description. We then split the list of outlets evenly among group members for the purpose of going on an observational visit to check that each of the criteria listed for the outlet is indeed met. This was done between February 25th, 2013 and February 28th, 2013. We contacted the stakeholders for their approval of the finalized information for each outlet and requested them to fill out the standard consent form provided by the faculty of Land and Food Systems. We distributed this consent form to food outlets on the map via email along with the food outlet descriptions specific to them. This was done between March 2nd, 2013 and April 4th, 2013. The representative individuals e-mailed were Linda Liu of Sprouts, Josie Midha of Triple O's, Bill Anderson of AMS Food Services, Claire McGilivray of LFSUS Wednesday night dinners and Emilia Moulechkova of the AMS UBC Food Bank (see Appendix I). Outlets that remained unchanged from UBC Sustainable Campus Food Guide were not specifically e-mailed for consent. One obstacle we faced during our research was the need to modify our method of collecting participants' consent. Some participants found it troublesome to print out the consent form and sign, scan, and email it back. Therefore, we also accepted online consent in order to accommodate these outlets in our project.

The evaluation procedure for this visioning of the UBC Sustainable Food map includes approval of the map vision through positive feedback from LFS 450 course instructors, SEEDS and the previously mentioned consent from outlets to be included on the map. Recommended future evaluative procedure is outlined in the "Scenario Evaluation" section of this report.

Findings & Outcomes

Components of a good map

As students with no prior experience with cartography and its principles, it was essential for us to conduct a literature review on cartographic principles in order to properly design an effective interactive map of the UBC sustainable food system. Three basic cartographic principles were established- legibility, ease of use and reliability. Legibility at glance was important as maps can become easily cluttered. Functionality is imperative for communicating information in interactive maps (Jenny *et al.*, 2008). Additionally, our map had to be a reliable and unbiased source for locating and describing sustainable food outlets on campus.

Popular UBC maps

To assess the current accessibility of UBC food systems, we investigated whether a campus map that highlighted sustainable initiatives exist. There were three easily accessible campus maps online that covered either one of these components.

"Wayfinding" is UBC's official online interactive map (www.maps.ubc.ca/). Being the first search query among search engines, the Wayfinding map is highly accessible and elaborate, detailing all major buildings and routes. Quick links on the side redirects users to relevant websites such as UBC attractions, student services, and food services. However, this map was not interactive and lacked functionality. Furthermore, the map was not all encompassing as it failed to include a number of less visible establishments. While this map is acceptable for general use, it is highly cluttered and is not noticeably engaging.

UBC's Printable Campus Map (http://www.students.ubc.ca/coursesreg/gettingaround-campus), although not interactive, offers basic campus details such as bus stops, food & beverage outlets, and parkades, allowing users to instantly locate items they require.

UBC Food Services (UBCFS) website (http://www.food.ubc.ca) provides a semicomprehensive outline of their food outlets. All UBCFS locations are included, including campus eateries, residence dining, campus restaurants, and residence minimarts. A simple map with all food outlets clearly plotted is provided (refer to Figure 1 in Appendix). In addition, a list of the locations and hours of all UBCFS operations is available. Despite the website's ease of navigation, the lack of interactivity makes it an inefficient communication tool. Similarly, the list of outlets on the website is not exhaustive as it fails to identify AMS, independent, and student run locations such as Sprouts and Agora.

Although the UBC Sustainable Food Guide (2011) is successful in communicating information regarding sustainable initiatives and opportunities available on campus knowledge gaps do exist. This is due to the ephemeral nature of UBC's landscape, as not all sustainable food outlets were included (as some were relatively new) nor were hours of operation provided. Furthermore, there was a lack of consistency in the quality and depth of outlet descriptions.

University of Toronto (2013) map

The most functional and comprehensive interactive campus map we found was from the University of Toronto (2013) (http://map.utoronto.ca/). Through its layers

function, the map easily sorted the various components of the campus into useful categories for users to select including: bus loops, bike racks and food outlets. The map's user-friendly platform also enables users to search for directions to the locations they desire.

Interview with Tom Brittnacher: practicality of GIS

The initial scope of the project had suggested the use of Geographic Information System (GIS) software. GIS allows for the capture, storage, management, manipulation and analysis of spatio-temporal geographical data. To develop a more thorough understanding of the software and its applicability towards our project, we sought the expertise of Tom Brittnacher, the UBC GIS Librarian. Through our meeting with Tom, we were informed of the full capabilities and advantages of GIS. Tom also explained the numerous training modules involved and the accessibility of the software on campus. The large time commitment required to grasp the basic functions of GIS, coupled with the overall complexity of the software and limited accessibility of GIS computer labs, convinced us that the GIS software was beyond the scope of our project. Instead, we collectively decided to focus our efforts on developing a vision and a preliminary design for an interactive UBC sustainable food systems map using other tools. The GIS component should be placed right after "components of a good map". This way we can quickly justify why we didn't use this though it was recommended. And it provides a better flow for how we developed our results (e.g. by drawing upon examples from other campus maps).

The Vision

In conclusion, an intuitive UBC map that highlights sustainable initiatives does not currently exist. As such, many of the sustainable and healthy practices exercised by campus food outlets often go unnoticed. Building upon the model set by the *UBC Sustainable Food Guide* (2011), we devoted much of our time towards creating a comprehensive list of green initiatives on campus in order to design an informative map. Data for all food outlets participating in sustainable initiatives was compiled (see Appendix V), including address, hours of operations, and website link if available. A full mock-up design of an example food outlet description has been included (Appendix III).

Our next step was to choose a template to base our map on. The interface we chose was OpenStreet map (2013) (http://www.openstreetmap.org), a free and editable worldwide map. We chose OpenStreet map (2013) over other maps due to its accuracy, and legibility of all campus components (including bus routes and paths between buildings).

Lastly, we combined stakeholder approved outlet descriptions, OpenStreet map (2013) and functional components of the University of Toronto map (2013) into one userfriendly design (Appendix IV). Layers allow users to select specific sustainable criteria such as locally sourced and fair-trade suitable to their needs. The ability to search for locations and retrieve directions promotes an individual's ability to find locations quickly and efficiently. The streamlined look of outlet descriptions allow user to quickly assess all pertinent information

Discussion

To try and ensure the greatest user experience in terms of ease of use of the interactive map as well as the best way to present the UBC Sustainable Food System in interactive map form our group did considerable research regarding cartographic principles as well as research concerning how people learn from interacting with maps. Herzele and Woerkum, in the journal of *Landscape and Urban Planning* argue that citizen participation increases when information is presented both verbally and visually, such as in the form of a map (2011), highlighting the goals of our project, to increase awareness of and participation in a sustainable food system.

Originally our project entailed working with the computer program Geographic Information Systems (GIS) that has applications that can be a very useful tool to analyze and manipulate data. Using GIS with our mapping project was intended to increase user understanding and interaction by easily allowing them to see walking and biking times between destination points on the map. As none of our group members had ever used GIS we sought out an expert, Tom Brittnacher, the UBC GIS librarian, to introduce us to GIS and the potential practical applications it has for our project. Our group conducted an informational interview with Tom and learned that GIS is a tool more suited for projects with large amounts of data to manage and analyze. In addition to GIS not being a great fit for our needs, the time needed to learn the bare basics of the program is twentyfour hours. Therefore, after speaking with Tom, our group decided that using GIS in our project was not the best use of our time and would decrease the amount of time that we would have to devote to other areas of the project.

The UBC Sustainable Food Guide (2011) informed many of the decisions we made regarding the map's presentation and the qualities of the food system the map would highlight. As a well-researched, cohesive and relevant document it was a clear choice for the guiding document for our project. Originally, our group interpreted the brevity of the food outlets listed on the map as a reflection of the number of sustainable food outlets on campus, but after discussing the list with Sophia Baker-French, we learned that the limited number of outlets in the guide was due to limited space. This encouraged our group to go out into the UBC campus and conduct primary research concerning the sustainability of other food outlets not listed. Using sustainable determination factors, such as recycling, composting, and fair trade, our group decided that the inclusion of many more food outlets on campus would create more accurate map of the UBC sustainable food system.

A limitation that our group discussed regarding the creation of an interactive map is the fact that the food system at UBC is not static. The campus landscape is perpetually changing and with high construction levels at campus, including the building of a new Student Union Building (SUB) which houses many food outlets, the locations of points on the map will be changing in the near future. This is an extremely important limitation in our project because if there is a true desire to maintain the effectiveness and relevance of the map, it will need to be monitored and updated on an ongoing basis.

Another limitation our group experienced in terms of effectively meeting our deadlines throughout the project was delayed response from key stakeholders regarding confirmation of their participation in the project. Limited options for contact, largely email, made it difficult to guarantee timely response from all stakeholders. This slowed

down the group's ability to move ahead with the project. Ultimately we heard back from the majority of stakeholders, which helped to increase the variety of places presented on the map.

One of the major goals in creating an interactive map of the UBC Sustainable Food System is to increase conscious food consumerism and involvement on campus by students, staff, faculty and visitors. A study at the Pennsylvania State University suggests that sustainable habits can be created due to the development of a social norm (Thapa, 1999). It was discovered that although the student population showed sympathetic tendencies towards the environment, their environmentally responsible actions were limited to recycling, likely due to the normalization of recycling within the community (Thapa, 1999). This shows the potential for UBC's sustainability initiatives regarding recycling and composting. If the map can help to call attention to UBC various sustainable waste disposal initiatives in conjunction with increased accessibility on campus, the likelihood of normalizing these sustainable disposal methods increases.

The Food and Agriculture Organization (FAO) argues that the importance of defining and encouraging sustainable diets is to avoid the risk of going down the wrong path (Berlingame and Dernini, 2012). This confirms the validity of the efforts of UBC to define and promote a sustainable food system, the long-term effects it can have on current and future consumption choices, and the positive effects those choices will have on individual nutrition and the planet. The FAO also argues the necessary internalization of current externalities in our food systems, by being aware of trade-offs in the food system, such as cheaper food due to the use of fossil fuels. Although consumers are paying a lower price for their consumption, the environment pays the ultimate price (Berlingame

and Dernini, 2012). UBC's steps towards creating a closed loop waste system, and focusing on local production help address these food system externalities, which ultimately, the interactive map will help create or increase awareness of.

In an article in journal *Psychology and Consumption* authors Tanner and Sibylle found that the main factors for Swiss consumer participation in sustainable diet practices were consumer attitudes towards "environmental protection, fair trade, local products, [...] availability of action-related knowledge, [and] perceived time barriers" (883). The creation of an interactive map of the UBC Sustainable Food System in conjunction with the UBC Sustainable Food Guide (2011) addresses each one of the above criteria for sustainable food consumption. The map and guide inform users of how UBC food outlets are incorporating these sustainable ideals and with the potential of helping to reduce perceived consumer time barriers to participate in these sustainable practices by visually representing them on a map.

As seen by the article referenced above, sustainable food consumption is a growing priority for the general populace. These theories and scientific findings will only be helpful and applicable if they can be communicated to the public at large, thus bridging the gap between researchers and consumers. The interactive map of the UBC Sustainable Food System has the potential to act as this bridge, making it easy for consumers to make sustainable food choices as well as connecting them to sustainable campus food initiatives, such as the UBC Farm and the Orchard Garden.

Stakeholder Recommendations

The following recommendations have been made to ensure the reliability and relevance of the UBC Sustainable Food Systems Map. They address specific features of the map for specific stakeholders to consider:

All Food Outlets: Compost visibility

Although most outlets we included on the map allegedly engage in a composting option, conversations with employees and observations made while visiting the food outlets revealed that the majority need to increase the visibility of their compost stations. We all agreed that compost was unexpectedly difficult to find or non-existent at almost every outlet that claimed it to be available. Not only would this increase proper waste disposal and move closer to the UBCFSP vision of "zero waste", but would support the reliability of our maps posted claims of compost facilities at particular locations. An ideal set up is the "waste, recycle, compost" stations seen in places like the Niche café (Appendix V). This set up is effective and efficient in empowering an individual to properly dispose of their waste. If this set up is not immediately possible, compost stations should be inspected and made visible to patrons by all outlets by September 2013. By September 2014, all outlets participating in the map should have the waste, recycle, compost station, allowing a stream lined and consistent waste capturing process.

UBC Food Services: Eco to Go Marketing

Based on singular visits to the UBC Food Service food outlets, Eco to Go is endorsed by all, but was not in consistent supply or well advertised. An advertising scheme should be created by September 2013 to increase utilization of the program by students and thereby allow increased supply of containers. This is relevant to the map in that if a location is labeled as being part of the "Eco to Go" program, the user should expect to be able to access Eco to Go containers when they go there.

Graphic Designer

Please see Appendix VI for detailed notes on the inclusion materials for the UBC Sustainable Food System map. It is recommended that the map is created to be easily accessed on both computers and mobile devices.

All Stakeholders: Map Visibility

It is recommended that the map be hosted on the SEEDS website. Each outlet on the map should provide the url for the map on their website. To generate awareness on a large scale, it is recommended that the link to the map be provided in residence welcome packages in September 2013. As well, a link to the map should be incorporated into the AMS agenda that is mass distributed in September 2013. Ideally, all faculty newsletters would provide a link to the website at some point during the school year, with a particular emphasis on the Land and Food Systems monthly faculty newsletter. This faculty is likely to be particularly interested in what the map has to offer as the map itself deals with a food system. Lastly, the map should be either featured or included in the Ubyssey in September 2013 and ideally throughout the year. Regular readers of the Ubyssey are

likely to be those who take particular interest in the happenings on campus, thereby likely to be interested in a comprehensive map of unique and progressive food outlets at UBC.

SEEDS: Map maintenance

It is crucial that the map is constantly updated as new sustainability initiatives and new buildings are perpetually appearing at UBC. This will be especially pertinent when the new student union building is open, as it is posed to pioneer several new sustainable initiatives and food outlets. It is recommended that a staff member at SEEDS is designated to maintain the map and that a LFS 450 scenario thoroughly updates the map by the spring of 2015 or when the new student union building opens, whichever occurs first. This can be done by following up on all outlets on the map and their continued, discontinued or new sustainable initiatives. A compilation of the outlets not on the map should also be created. A survey to understand the interest of these outlets to be on the map should be conducted, as explained below.

Future LFS 450 Scenario: Survey to gauge awareness of the map

The primary recommendation for a future LFS scenario is to evaluate the interest that the map has garnered, with specific attention paid to outlets not currently included on the map. A survey should be conducted that measures the outlet's awareness of the map, perceived relevance of the map and interest in being included. This would not only evaluate the visibility of the map, but also potentially induce the outlet to investigate the map further or identify their willingness to change accordingly so as to be included on the map. Assuming that the map will be implemented by September 2013, this survey should be performed in the January 2014 semester. A secondary survey should be performed

within among the general UBC population to measure the general awareness, how individuals became aware of and the usage frequency of the UBC Sustainable Food System map. Results from this survey can dictate how to further expand awareness of the map across campus. This survey should also be performed in the January 2014 semester.

Scenario Evaluation

The success of this initiative will be evaluated based on the successful approval of stakeholders, attention the map garners and subsequent interest of food outlets not currently included on the map to be willing to change so that they may be included. First, our project requires that our application for a grant from the AMS Sustainability Project be awarded. This funding will go towards paying a graphic designer to create the map from our vision. We applied for the grant on February 27th, 2013 and expect to hear back from AMS in April. Approval from immediate contributors including Sophia Baker-French (LFS 450 instructor), Josh Edwards (LFS 450 teaching advisor) and SEEDS would be deemed as a successful step in bringing the map to fruition. From January 2013 to March 2013, each of the aforementioned individuals has had direct input and authority in visioning the map. For the descriptive summaries we created to represent each outlet that is to be included on the map, we required the approval and consent from a person of authority at the outlet. As of April 5th, 2013, through email, we have received consent from all of the outlets except Bill Anderson of AMS Food Services. This representative has given phone consent, but has yet to send e-mail consent. It is recommended to continue to contact him. Complete consent considered a determinant of success for the map in our original plan created at the beginning of the project.

Once the graphic designer is able to proceed with the generation of the map, the exposure of the map can be gauged through logging weekly traffic using a web analysis tool, such as Google Analytics. Through map exposure on the SEEDS website and through food outlet websites included on the map linking to the map at SEEDS, we expect significant traffic to the online map. The hope is that there would be an increase in traffic to the SEEDS website which eventually levels off as the map becomes part of daily campus life for students. To aid this, we vision the link also being included in the residence welcome package. As previously mentioned, we recommend that a future scenario carry out surveys with outlets not included on the map, to determine their interest in being on the map. This will, in turn, determine if the visibility of the map elicits a desire to be included on it. A desire to be on the map would mean it's visibility and relevance at UBC is significant.

Reflection on the successes and challenges

Our group faced our most difficult challenge at the onset of the project. Specifically, there were conflicting visions for the final outcome of the project. We had a difficult time coming to consensus on what we should do, how much we should do and how we should do it as we were unclear what was expected of us and our project. It was not until we took firm ownership of the project and united as a group with our own common vision, that progress was made. Thereafter, we came together as a group and decided on the major design concepts and base of the map as well as what to include on the map. From the start we had to consider what could be achieved given our time frame and individual skill sets. None of us were graphic designers or had learned programming

and therefore were limited in what we could create and develop ourselves. In the end, we attempted to illustrate our vision as clearly as possible by drawing upon examples of other interactive campus food maps as well as some simple self-designed graphics using Microsoft Word. One of our major fortes was that we were organized and orderly throughout our project. We took advantage of all the class time given to us to accomplish as much of our project work as possible. The meeting minutes and agenda helped us stay on track and reminded us of our individual assignments and deadlines. As a result, we always felt well-prepared going into every meeting and did not feel pushed for time or over encumbered by our project work. We were very adept at breaking off the various components of the project into manageable chunks. Although, we were a structured and orderly group, we were also flexible enough to make accommodations for our group members when necessary. All in all, we work well as a team and enjoyed working on this project.

Media Release

UBC Food System Project

April 2013

Project Title: Interactive Map of the UBC Food System



Description:

This year marked the 13th iteration of the University of British Columbia Food System Project (UBCFSP), a community-based action research project initiated jointly by the UBC Faculty of Land and Food Systems (LFS) and the UBC Social Ecological Economic Development Studies (SEEDS) Program. One of the nine scenarios introduced to LFS 450 students this year focused on developing an interactive food system map that highlights the sustainable food initiatives present for the UBC campus. Building upon the past project resources, the students involved in this project – Alice Feng, Kelsey Hilton, Shelby McLeod, Aireen Su, and Nathan Wong – produced a vision for an interactive map that is both aesthetically appealing and functional. The inclusion of food initiatives on the UBC campus was based on a list of sustainable criterions that the students compiled from the UBC Sustainable Food Guide (2011). Any food initiatives that met two or more of the criteria could be included into the map.

Upon completion of the map, the students hope that it will be available and accessible to the public through the SEEDS Program website, faculty websites, and UBC welcome packages.

Quote

"An interactive food systems map will not only encourage engagement of the sustainable aspects of the UBC food system by UBC students, faculty, staff and visitors, but also bring awareness to where there is a lack of sustainability initiatives."

References

- Baker-French, S. & Richer, L. (2011). The UBC Food System Project: Summary 2011. University of British Columbia. Retrieved March 29, 2013 from the website: http://sustain.ubc.ca/sites/sustain.ubc.ca/files/seedslibrary/UBCFSP-SummarReport-2011_Final%20Merged.pdf
- Bartley, D. (2008). Mapping Edible Food Places on the UBC Campus. Retrieved from UBC SEEDS library: http://sustain.ubc.ca/sites/sustain.ubc.ca/files/seedslibrary/GEOG%20472%20Edibl e%20Food%20Places.pdf
- Burlingame, B. A., Dernini, S., Biodiversity International (Organization), & Food and Agriculture Organization of the United Nations. (2012). Sustainable diets and biodiversity: Directions and solutions for policy, research and action.
- Cohen, J.E. (1995). Population growth and earth's human carrying capacity. *Science*, 269, 341-346.
- Cullum, A., Gunther, B. & Ristaniemi, E. (2006). Sustainability Mapping Project. Retrieved from UBC SEEDS library: http://sustain.ubc.ca/sites/sustain.ubc.ca/files/seedslibrary/Sustainability%20Mapping%20Project.pdf
- Food and Agricultural Organization of United Nations (FAO). (2000). World review of fisheries and aquaculture. Retrieved from http://www.fao.org/docrep/003/X8002E/x8002e04.htm.
- Helmer, M. and Hilhorst, D. (2006). Natural disasters and climate change. *Disasters*, *30*, 1-4.
- Jenny, B., Jenny, H. and R\u00e4ber, S. (2008). Map Design for the Internet. In: M. P. Peterson (editor), International Perspectives on Maps and the Internet, Berlin Heidelberg New York: Springer, p. 31-48. Retrieved from http://cartography.oregonstate.edu/pdf/2008_Jenny_etal_MapDesignForTheInternet .pdf
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G.(2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18, 503-520.
- Myers, R.A., & Worm, B. (2003). Rapid worldwide depletion of predatory fish communities. *Nature*, 423, 280-283.

- Oldeman, L.R. (1994). The global extent of soil degradation. In Greenland, D.J., & Szaboles, I. (Eds.). Soil Resilience and Sustainable Land Use (pp. 99-118). Wallingford, UK: CAB International.
- Roberts, J.A.,& Bacon, D.R. (1997). Exploring the subtle relationships between environmental concern and ecologically conscious behavior. *Journal of Business Research*, 40, 79-89.
- Rojas, A., Richer, L., & Wanger, J. (2007). University of British Columbia Food System Project: Towards Sustainable and Secure Campus Food Systems. Retrieved on March 29, 2013 from http://www.springerlink.com/content/q06p509022332767/fulltext.pdf
- Solomon, S. (Ed.). (2007). Climate change 2007-the physical science basis: Working group I contribution to the fourth assessment report of the IPCC (Vol. 4). Cambridge, UK: Cambridge University Press.
- Tanner, C., & Sybille, W. K. (2003). Promoting sustainable consumption: determinants of green purchases by swiss consumers. *Psychology & Marketing*, 20(10), 883-902. Retrieved from http://search.proquest.com.ezproxy.library.ubc.ca/docview/227730933?accountid= 14656
- Thapa, B. (1999). Environmentalism: the relation of environmental attitudes and environmentally responsible behaviors among undergraduate students. *Bulletin of Science, Technology & Society, 19*(5), 426-438.

UBC Food Services (2013). Retrieved March 2013 from http://www.food.ubc.ca/locations-and-hours/location-map

- UBCFSP (2013). UBC Sustainable Campus Food Guide. Retrieved from http://www.sustain.ubc.ca/campus-initiatives/food/ubc-sustainable-campus-foodguide
- University of Toronto Map (2013). Retrieved March 2013 from http://map.utoronto.ca/
- Woerkum, v., C.M.J, & Herzele, V., A. (2011). On the argumentative work of map-based visualisation. *Landscape and Urban Planning*, *100*(4), 396-399.
- Walther, G.R., Post, E., Convey, P., Menzle, A., Parmesan, C., Beebee, T.J.C., Fromentin, J.M., Hoegh Guldber, O., & Bairlein, F. (2002). Ecological response to recent climate change. *Nature*, 416, 389-395.

Appendices

Appendix I	Consent Forms/Emails
Appendix II	UBC Food Services Location Map
Appendix III	Mock-up of map outlet description
Appendix IV	Map Prototype
Appendix V	Ideal Waste Disposal Graphic
Appendix D	Notes for the Graphic Designer

Appendix I- Consent Forms and Emails

THE UNIVERSITY OF BRITISH COLUMBIA



Dr. Andrew Riseman, Agroecology Faculty of Land and Food Systems 323-2357 Main Mall Vancouver, BC, Canada V6T 1Z4

Tel: 604-822-9607 Fax: 604-822-2016 Email: andrew.riseman@ubc.ca

INFORMED CONSENT

I am agreeing to collaborate in the study entitled "The UBC Food System Project", conducted by students of the Faculty of Land and Food Systems within their course "Land, Food & Community III" (LFS 450) in collaboration with UBC Food Services, the Alma Matter Student Society (AMS), AMS Food and Beverage Department, UBC Waste Management, Faculty of Land and Food Systems, Centre for Sustainable Food Systems at UBC Farm, the UBC Sustainability Office and its SEEDS Program (Social, economic and ecological development studies).

I have been informed of my right to interrupt any interview or questionnaire linked to this project in which I agree to participate, at any time that I consider necessary. Also, I have been assured that my answers will remain anonymous unless I provide written permission (below) to the UBC student conducting the interview or survey, to disclose my name, working position or any other information revealing my identity in any possible future use of the information I provide.

Signature of the person volunteering to participate in the study:

Name and signature if accept to reveal name, revealing my identity (or freely chosen name and signature, if you prefer): 0 THOMAS J BRITTNACHER 00

Contact information (Name, Telephone #, fax#, email, mailing address) if accept to be quoted by name or position in public use of the information I provide to review the quotes:

KOERNER LIBRARY ZIBE	tom. britmacher Cubc. ca
1958 MAIN MALL	
VANCOUNDER BC. VGT 122	2
Consent to be voice or video recorded:	

Date:_____ Name of the interviewer:

If you have any concern about this study please contact the Principal Investigator at the above contact information or Professor Andrew Riseman, the Course Instructor at E-mail: <u>andrew.riseman@ubc.ca</u> MCML 323 - 2357 Main Mall, Vancouver, BC Canada, V6T 1Z4 Tel 604.822.9607 Fax: 604-822-2016 Dr. Andrew Riseman Principle Investigator January, 2013

Tom Brittinacher's (GIS librarian) consent



Sprouts and Seedlings consent

Midha, Josie to me (*) Hi Aireen, I consent to my participation being included in this project. Thank-you!!!!



Triple O's consent

Hello Kelsey,

Yes, I Emilia Moulechkova (Coordinator of UBC AMS Food BAnk) give consent for the inclusion of the UBC AMS Food Bank in the interactive mapping project as part of the larger "UBC Food Systems Project."

Regards,

Emilia Moulechkova Coordinator, Food Bank AMS Student Society of UBC Vancouver P: <u>604 827 5325</u> F: <u>604 822 9019</u> 58 - 6138 SUB Student Union Blvd, Vancouver V6T 1Z1 AMS: Enhancing Student Life | <u>ams.ubc.ca</u>

UBC AMS Food Bank Consent

Hi Kelsey,

sorry i've been such a flake with this: thanks for following up. Yeah the writeup looks good! and I read the consent form too, all looks good. Let me know if there's anything else you need. Claire

LFSUS Wednesday Night Dinner consent

THE UNIVERSITY OF BRITISH COLUMBIA



Dr. Andrew Riseman, Agroecology Faculty of Land and Food Systems 323-2357 Main Mall Vancouver, BC, Canada V6T 1Z4

Tel: 604-822-9607 Fax: 604-822-2016 Email: andrew.riseman@ubc.ca

INFORMED CONSENT

I am agreeing to collaborate in the study entitled "The UBC Food System Project", conducted by students of the Faculty of Land and Food Systems within their course "Land, Food & Community III" (LFS 450) in collaboration with UBC Food Services, the Alma Matter Student Society (AMS), AMS Food and Beverage Department, UBC Waste Management, Faculty of Land and Food Systems, Centre for Sustainable Food Systems at UBC Farm, the UBC Sustainability Office and its SEEDS Program (Social, economic and ecological development studies).

I have been informed of my right to interrupt any interview or questionnaire linked to this project in which I agree to participate, at any time that I consider necessary. Also, I have been assured that my answers will remain anonymous unless I provide written permission (below) to the UBC student conducting the interview or survey, to disclose my name, working position or any other information revealing my identity in any possible future use of the information I provide.

Signature of the person volunteering to participate in the study:

Name and signature if accept to reveal name, revealing my identity (or freely chosen name and signature, if you prefer):

Contact information (Name, Telephone #, fax#, email, mailing address) if accept to be quoted by name or position in public use of the information I provide to review the quotes:

Consent to be voice or video recorded:

Date: 3/20/2013 Name of the interviewer: Kelsey Hilton

If you have any concern about this study please contact the Principal Investigator at the above contact information or Professor Andrew Riseman, the Course Instructor at E-mail: andrew.riseman@ubc.ca MCML 323 - 2357 Main Mall, Vancouver, BC Canada, V6T 1Z4 Tel 604.822.9607 Fax: 604-822-2016 Dr. Andrew Riseman Principle Investigator January, 2013

Victoria Wakefield of UBC Food Services consent



Appendix II-UBC Food Services Location Map

Appendix III-Mock-up of map outlet description



Agora Eats Café MacMillan Building (Bottom Floor) (604) 822-4561 http://blogs.landfood.ubc.ca/agora/

Hours of Operation:

Mon:	0930 - 1500
Tues:	0930 - 1500
Wed:	0930 - 1500
Thurs:	0930 - 1500
Fri:	0930 - 1500
Sat:	Closed
Sun:	Closed



LocalCompostDishware



Agora is an independent, student-run, volunteer-based, non-profit café aimed at offering hands on experience to volunteers and demonstrating a sustainable food system for the community. Most offerings are made with local, seasonal and organic ingredients, many from The Orchard Garden just steps away from the café doors.

Famous for:

- Affordable vegetarian and vegan menu.
- Homemade quiche (made with UBC Farm eggs when available)
- Homemade baked goods
- Homemade soups and sandwiches made with meat-free protein

Appendix IV-Map Prototype



Appendix V-Ideal Waste Disposal Graphic



Retrieved from:

http://www.planning.ubc.ca/vancouver_home/news_and_events/enewsletter/february_2013/articles697.php

Appendix VI- Notes for the Graphic Designer

Notes for the Graphic Designer

Layers

WaterFillz Station	Local
Eco to go	Permanent Compost Station
Fair trade	Mug discount

Icons

Icons	Recommended Look
Food Outlet	Fork and Knife
Garden/Farm	Plant Sprout
Compost Centre	Worm coming out of an apple core

Icons with previously created images

WaterFillz

Oceanwise



UBC Farm

FairTrade





Descriptions of food outlets and other places to be included on the map

GeoGarden

The GeoGarden is a community garden located in the back courtyard of UBC's Geography building at 1984 West Mall, in Vancouver, BC. The purpose of the GeoGarden is to foster a sense of community while engaging members in a hands-on sustainability project. The garden is a demonstrative example of urban agriculture.

http://ubcgeogarden.wordpress.com

Email: ubcgeogarden@gmail.com

Seedlings

Seedlings is an offshoot of Sprouts and is located on the top floor of the Thea Koerner Graduate Centre in the North West corner of campus, close to the rose garden. It is a full service eatery that specializes in raw, vegan and vegetarian cuisine made from organic, locally sourced and fair trade items. Additionally, the café serves inexpensive espressobased drinks such as lattes, cappuccinos, and Americanos. Prices are kept affordable as the cafe is 100% student volunteer-run.

Famous for:

- A selection of vegetarian, vegan and raw entrees made from organic and locally sourced produce
- Affordable prices
- 100% student volunteer-run
- Serves fair-trade, organic coffee

Address: 6371 Crescent Road (Thea Koerner Graduate Centre, Top Floor)

Hours: 9am - 4pm Mon- Fri

Sprouts

Sprouts is a student-run, volunteer-based and non-profit café and grocery store that is committed to promoting local sustainable food systems. Most offerings are made with seasonal and organic ingredients that are locally sourced. Head to Sprouts on Fridays at 11:30am to 1:30pm for a by-donation hearty vegan meal, don't forget your tupperware!

Famous For:

- Community Eats: a by-donation hot lunch
- Sprouts Box: a box of locally produced organic fruits and veggies delivered weekly to campus residents' doors
- Bulk Buying Club: enables customers to buy organic goods in bulk without the mark-up
- Sprouts Workshops: a variety of workshops on cooking, baking, and sustainable lifestyles

Address: 6138 Student Union Blvd (Student Union Building, Bottom Floor)

Phone: 604.822.9124

Hours: 9am - 4pm Mon- Fri

Triple O's

Conveniently located inside David Lam Management Research Centre, Triple O's serves a wide variety of burgers and milkshakes. This licensed restaurant has a capacity of 200 seats including a beautiful patio. Large flat screen TV's are available broadcasting sporting and news events. Composting and recycling stations are designed specifically for Triple-O's packaging.

Their combo meals are served with fries and/or optional sides and salads. Fair-trade coffee is also available at Triple O's.

Address: 2015 Main Mall (David Lam Management Research Centre)

Phone: 604.822.3256

Hours: 10:30am - 9:00pm Daily (Sept-April)

10:30am-7:00pm Daily (May-August)

Agora Eats Café

Agora is an independent, student-run, volunteer-based, non-profit café aimed at offering hands on experience to volunteers and demonstrating a sustainable food system for the community. Most offerings are made with local, seasonal and organic ingredients, many from The Orchard Garden just steps away from the café doors.

Famous for:

- Affordable vegetarian and vegan menu
- Homemade quiche (made with UBC Farm eggs when available)
- Homemade baked goods
- Homemade soups and sandwiches made with meat-free protein

Address: 2357 Main Mall (MacMillan Building, Bottom Floor)

Phone: 604.822.4561

Hours: 9:30am - 3pm Mon-Fri

LFS Wednesday Night Dinners

Every Wednesday, in the basement of Agora, LFS volunteers cook up a hearty dinner. They source locally when available and if you bring your own container you can jump the line!

Address: 2357 Main Mall (MacMillan Building, Bottom Floor)

Hours: 5:00pm-6:30pm Wed

UBC Food Services Outlet Descriptions:

Cafe MOA

Located in the courtyard of the Museum of Anthropology, Café MOA offers a bit of everything from coffees and soups as well as daily specials. A perfect place to dine during your visit to the Museum or after a hike.

Famous for:

- Salmon and vegetable chowder
 - ✤ eco-to-go
 - ✤ recycling
 - composting
 - ✤ Fair Trade coffee and tea
 - mug/container discount

Address: 6393 North West Marine Drive (Museum of Anthropology)

Phone: 604.827.4738

Hours: 10:00am - 4:00pm Daily

Cafe Perugia

Situated in the Life Science Centre, Café Perugia offers a wide array of selection from breakfast sandwiches paninis, gourmet salads samosas to cooked meals. Serves locally roasted Milano Coffee and specialty espresso drinks

Famous for:

- Homemade salads
- On-site roasted BC chicken
- Boutique locally roasted Fair Trade coffee
 - ✤ eco-to-go
 - recycling
 - composting
 - mug/container discount

•••

Address: 2350 Health Sciences Mall (Life Sciences Centre)

Phone: 604.827.3291

Hours: 7:30am – 5:00pm Mon-Fri

Ike's Café

Conveniently located in the ever popular Irving K Barber Learning Centre, Ike's Café offers many types of daily sandwiches, feature pasta specials, and hot entrees. Ike's Café has everything you need whether you're in for a long day of studying or quick lunch. Serves locally roasted Milano Coffee and specialty espresso drinks.

Famous for:

- Pasta specials
 - ✤ eco-to-go
 - ✤ recycling
 - ✤ composting
 - ✤ Fair Trade coffee and tea
 - mug/container discount

Address: 1961 East Mall (Irving K. Barber Learning Centre, South Wing, Second Floor)

Phone: 604.827.3926

Hours: 8:00am - 10:00pm Mon-Thu

8:00am – 4:00pm Fri

12:00pm - 5:00pm Sat

11:00am – 7:00pm Sun

IRC Snack Bar

Located in Woodward, the IRC Snack Bar offers a wide variety of snacks including paninis, samosas, sandwiches and baked goods. The IRC also offers hot and cold beverages.

- ✤ eco-to-go
- ✤ recycling
- ✤ composting
- ✤ Fair Trade coffee and tea
- mug/container discount

Address: 2194 Health Sciences Mall (Instructional Resources, Centre, Main Floor)

Phone: 604.822.4291

Hours: 7:45am – 3:00pm Mon-Fri

The Loop Café

Located in the Centre for Interactive Research on Sustainability (CIRS) building, the Loop Café is widely regarded as the most sustainable and environmentally friendly restaurant on campus. Relying on seasonally and locally sourced ingredients, the Loop Café offers an endless array of specialty soups and stews, made on campus and a salad bar with an extensive selection. Serves locally roasted Ethical Bean Coffee and specialty espresso drinks

Famous for:

- Local products like apple butter!
- Homemade lemonade and Fair Trade iced tea
- Homemade entrees
- Gluten-free baked items
- No bottled beverages
- Vegetarian and vegan selection daily.
- Featuring local UBC Farm products, local and BC ingredients

Address: 2260 West Mall (Main Floor)

Phone: 604.827.3785

Hours: 7:45am - 4:00pm Mon-Fri

Magma Cafe

Located in the Earth and Ocean Sciences building the Magma Cafe is a great place to stop a refuel. It offers a selection of hot and cold beverages as well as pre-made sandwiches, snacks and soups.

- ✤ eco-to-go
- ✤ recycling
- composting
- ✤ Fair Trade coffee and tea
- mug/container discount

Address: 6339 Stores Road (Main Floor)

Phone: 604.827.1525

Hours: 7:45am – 3:00pm Mon-Fri

Neville's

Locate in Scarfe, Neville's is a great place to pick a snack or light lunch offering soups, sandwiches and a variety of drinks.

- ✤ eco-to-go
- ✤ recycling
- Fair Trade coffee and tea
- mug/container discount

Address: 2125 Main Mall (Neville Scarfe Building – Library, Main Floor)

Phone: 604.827.3325

Hours: 7:45am - 4:45 Mon-Thu

7:45am – 2:15pm Fri

The Niche Cafe

Situated in the Beatty Biodiversity Museum, Niche has a wide selection of snack and beverages.

- ✤ eco-to-go
- ✤ recycling
- ✤ composting
- ✤ Fair Trade coffee and tea
- mug/container discount

Address: 2212 Main Mall (The Beaty Biodiversity Museum)

Phone: 604.827.4814

Hours: 9:30am – 3:00pm Mon-Fri

12:00pm - 4:00pm Sat-Sun

Pharmacy Cafe

Pharmacy cafe is located on the main floor of the Pharmacy building and serves hot sandwiches, soups, cold salads and a variety of snack items.

- Eco-to-go
- ✤ recycling
- ✤ composting
- mug/container discount
- ✤ Fair Trade coffee and tea

Address: 2405 Wesbrook Mall (Main Floor)

Phone: 604.827.1521

Hours: 7:30am - 3:00pm Mon-Fri

The Point Grill

This is UBC's trendy up-scale restaurant.

Famous for:

- Seasonally-inspired cuisine with a commitment to using local and sustainable foods
- Free-range chicken wings
- Salt Spring Island Mussels
- Non-medicated and hormone-free chicken and beef
- BC seafood
- Vegetarian, vegan, dairy-free and gluten-free options
 - ✤ compost
 - mug/container discount
 - ✤ eco-to-go
 - ✤ recycling

Address: Building 4 – 2205 Lower Mall (Marine Drive Residence)

Phone: 604.822.9503

Hours: 11:00am - 10:00pm Daily

Pond Cafe

Pond Cafe is located in the Ponderosa building and serves light snacks and organic soups. They serve Tazo teas and proudly brew Starbucks coffee.

- ✤ compost
- mug/container discount
- ✤ eco-to-go
- ✤ recycling

Address: 2071 West Mall (Ponderosa Centre)

Phone: 604.822.3651

Hours: 7:30am - 4:45pm Mon-Thu

7:30am – 2:00pm Fri

Reboot Cafe

Reboot Cafe is located on the main floor of the ICICS building. It serves breakfast and lunch. Menu selections include soups, salad, and a variety of sandwiches. Specialty coffee and tea are also available.

- Eco-to-go
- ✤ composting
- ✤ recycling
- Mug/container discount
- ✤ Fair Trade coffee and tea

Address: 2355 Main Mall (ICICS Addition, Main Floor)

Phone: 604.822.1992

Hours: 8:30am - 3:30pm Mon-Fri

Sage Bistro

This is UBC's fine dining restaurant.

Famous for:

- A wide selection of Ocean Wise options look for the menu icons
- Smoked local, organic tofu
- Free-range chicken
- Local lamb
- Vegan options
- Seasonal and organic salads

Address: 6331 Crescent Road (University Centre)

Phone: 604.822.0968

Hours: Closed for renovations from December 7, 2012. Reopening September 2013.

Sauder Exchange Cafe

Conveniently located on the first level of Henry Angus Building, Sauder Exchange Cafe features soups, wraps, sandwiches, and specialty beverages. Both indoor and outdoor seating areas are available. Serves locally roasted Milano Coffee and specialty espresso drinks.

- ✤ eco-to-go
- ✤ compost
- ✤ recycling
- mug/container discount

Address: 2053 Main Mall (Henry Angus Building, Main Floor)

Phone: 604.827.4783

Hours: 7:45am - 8pm Mon-Thu

7:45am - 4pm Fri 9am - 3pm Sat 10am - 3pm Sun

Stir It Up Cafe

Stir it Up Cafe is located in Buchanan Block A building. Menu items include soups, wraps, paninis, and sandwiches. Muffins, cookies and a variety of snack are also available.

- ✤ eco-to-go
- ✤ compost
- ✤ recycling
- mug/container discount

Address: 1866 Main Mall (ARTS - Buchanan Block A)

Phone: 604.822.2002

Hours: 7:45am - 7:30pm Mon-Thu

7:45am - 3:30pm Fri

Totem Park

Menu selections include homemade soups, burger bar and stir-fry bar, a full salad bar and a hot entrée selection, which includes a daily special of the day. The deli station, which features a variety of fresh breads, offers sandwiches made to order and daily specials. 100% Organic and Fairly Traded Ethical Bean coffee, tea, fountain sodas and juices, and milk are also available.

Famous for:

- UBC Farm options on salad bar
- Healthy Shakes using Fair Trade and local produce
- Smoked Salt Spring organic tofu for wraps, salads and more
- Local and organic apples
- Eco to go program
- Gluten free bakery, pizza and sandwich options.
 - ✤ compost
 - mug/container discount
 - ✤ eco-to-go
 - ✤ recycling

Address: 2525 West Mall, Totem Park (Coquihala Common Block, Dining Room)

Phone: 604.822.6828

Hours: 7:15am – 8:45pm Mon-Thu

7:15am – 7:30pm Fri

8:00am – 7:30pm Weekends

Place Vanier Residence Dining

Vanier is more than a dining hall. It has been a leader at UBC in adopting sustainable menu items.

Famous for:

- UBC Farm seasonal soups- there are always two kinds available
- Whole grain stews and pilafs
- Healthy shakes using Fair Trade and local produce
- Smoked organic tofu from Victoria for wraps, salads and more
- Local and organic apples
- Homemade sauces and gravies
- Gluten free bakery, pizza and sandwich options
- Eco-to-go program
- 100% Ocean Wise fresh seafood menu options
- Homemade lemonade with fresh herbs
 - ✤ compost
 - mug/container discount
 - ✤ eco-to-go
 - ✤ recycling

Address: 1935 Lower Mall, Place Vanier (Gordon Shrum Common Block, Dining Room)

Phone: 604.822.2622

Hours: 7:15am – 8:45pm Mon-Thu

7:15am – 7:30pm Fri

8:00am – 7:30pm Weekends

Wescadia Catering

UBC Food Services' catering service.

Famous for:

- Vegetarian, vegan and gluten free menu options
- 100% Ocean Wise seafood menu choice
- Customized sustainable menu options available upon request
- Reusable dishware available
- Use of electric vehicles for campus deliveries
- Drop delivery service items are compostable or recyclable

Address: 2525 West Mall

Phone: 604.822.2018

AMS Food Outlet Descriptions

Blue Chip Cookies

Located in the Main Concourse of the SUB. Blue Chip Cookies serve fresh made cookies and other baked goods every day as well high quality drip coffee and tea. Their selection also includes a number of savoury items, gluten free and vegan options. Famous for:

- Marbelous Cookie
- Their variety of gluten free, vegan and sugar free baked goods
- All coffees, teas and chai based drinks are 100% fair trade and organic

Address: 6138 Student Union Boulevard (Student Union Building, Main Floor) Phone: 604.822.6999

Hours: 7am – 7pm Mon – Fri

9am – 6pm Sat 9am – 3pm Sun

Bernoulli's

Located in the main concourse of the SUB, Bernoulli's Bagels offers a wide variety of low-fat bagels baked fresh throughout the day using high-quality ingredients and no preservatives. Compliment any bagel or sandwich with a bowl of wholesome soup or freshly squeezed juices!

Famous for:

- Homemade bagels and organic bagel selection
- Local apples and pears
- Vegan cream cheese spreads

Address: 6138 Student Union Boulevard (Student Union Building, Main Floor)

Phone: 604.822.8806

Hours: 7am – 7pm Mon-Fri

10am – 3pm Sat

Closed Sun

The Honour Roll

The AMS's very own sushi joint! The Honour Roll offers many pre-made dishes and fresh items are available upon request.

Famous for:

- A quick and healthy meal
- Vegetarian and vegan options
- Oceanwise California rolls and Salmon rolls

Address: 6138 Student Union Boulevard (Student Union Building, Bottom Floor) Phone: 604.827.5589 Hours: 10am – 6pm Mon-Fri

11am – 3pm Sat

Closed Sun

AMS Food Bank

The UBC/AMS Student Food Bank provides emergency food relief to current UBC students. All UBC students are welcome to use the Student Food Bank by showing a valid student ID card. The Student Food Bank offers dry goods and non-perishable groceries. They often have personal hygiene supplies as well.

Address: 6138 Student Union Boulevard (Student Union Building, Bottom Floor – Room 58) Phone: 604.827.5589 Hours: 9am – 10am, 10:30am – 2pm, 3 – 5pm Mon

1 – 3pm Tue

- 9 10am, 11am 2:45pm Wed
- 1 3pm Thu
- 9 10am, 1 1:45pm Fri

WaterFillz Locations:

Two in the SUB: One on the 1st floor, one in the basement, 6138 Student Union Boulevard

One in the MacMillan Building: 1st floor, 2357 Main Mall

Visual Aspects

We agreed that the University of Toronto map (2013) is an excellent example of a both aesthetically pleasing and comprehensive map. The map can be found here: http://map.utoronto.ca/

We agreed that OpenStreet map (2013) (a Wikipedia based, editable map) provided the visual simplicity and color scheme that would be suitable for a map of the UBC Sustainable Food System. The map can be found here: http://www.openstreetmap.org/

This figure represents our vision for what users would see when they click on a specific location, the example of Agora Café is used here:



The image below is a sample compilation inspired by the University of Toronto map (2013), using the aforementioned information box, OpenStreet map (2013) and the above listed icons in an interactive format.

