SUSTAINABILITY PLAN 2019-2024

Spring suckers spawn in the McIntyre River at Lakehead Thunder Bay.

Sustainability Stewardship Council



Office of Sustainability

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Students in Orillia walk among cattails, planted as part of the low impact development (LID) infrastructure built to achieve LEED Platinum status for the Academic Building.

EXECUTIVE SUMMARY

Defining Sustainability

Sustainability is a complex term as its meaning can differ from place to place and from person to person. At Lakehead University, sustainability is considered in a pluralistic and inclusive way, encompassing human and ecological health, social justice and equity, Indigenous rights, secure livelihoods, workplace wellbeing, and leadership for vibrant and resilient communities.

Sustainability Governance

In spring 2016, an Executive Advisory Committee, in collaboration with the Sustainability Coordinator, launched a sustainability governance framework for both campuses. Recognizing that sustainability initiatives have been organized by staff, faculty, and students for many years, this framework supports a participatory process that is non-hierarchical and empowers the self-organizing talents of creative individuals and groups.

Embracing a culture of sustainability is a challenging but necessary transition. The power to create a more sustainable Lakehead lies in our collective willingness to authentically engage with the issues and with each other, and in our commitment to translate our ongoing dialogue into meaningful actions. Crafting a governance plan for sustainability raises issues of power, authority, and accountability. Efforts to be inclusive and inviting of diverse perspectives depend on fostering a non-hierarchical ethic of democratic dialogue and decision-making.

M.Ed Candidate Gemma Romano, PhD Candidate Roopa Rakshit (not pictured), and Assistant Professor Lindsay Galway presented their sustainability-focused research in 2017 to The Honourable Elizabeth Dowdeswell, Lieutenant Governor of Ontario, along with Dr. Batia Stolar from the Office of Research and Innovation, and Ledah McKellar from the University Sustainability Coordinator.

Photo credit: Dr. Andrew Dean



LAND ACKNOWLEDGMENT

Land Acknowledgement

Lakehead University respectfully acknowledges its campuses are located on the traditional lands of Indigenous Peoples.

Lakehead Thunder Bay is located on the traditional lands of the Fort William First Nation, Signatory to the Robinson Superior Treaty of 1850. Lakehead Orillia is located on the traditional territory of the Anishinaabeg. The Anishinaabeg include the Ojibwe, Odawa, and Pottawatomi nations, collectively known as the Three Fires Confederacy.

Lakehead University acknowledges the history that many nations hold in the areas around our campuses, and is committed to a relationship with First Nations, Métis, and Inuit Peoples based on the principles of mutual trust, respect, reciprocity, and collaboration in the spirit of reconciliation. The Anishinaabeg called the areas now known as Thunder Bay and Orillia home for thousands of years before they were settled by Europeans. The term Anishinaabeg refers to a diversity of nations. While Orillia is on the traditional territory of the Ojibwe, Odawa, and Pottawatomi nations, Thunder Bay is on the traditional territory of the Ojibwe nation. Although we refer to the Anishinaabeg in this document, we are aware that through migration many First Nations, Métis, and Inuit Peoples now call these areas home. A land acknowledgement honours and recognizes the historical presence of Indigenous Peoples and their rights to and relationship with the land that non-Indigenous people now call home. It is an important first step on the path to reconciliation. Land acknowledgements are more than statements; they call for the ongoing recognition of the protocols and processes of local Indigenous Peoples. Like other acts of reconciliation, land acknowledgements must be followed with continued and meaningful concrete actions.



Lakehead University Elders Council Member, Elder Gene Nowegejick of Kiashke Zaaging Anishinaabeg, shares traditional sweat lodge teachings. Elder Gene also conducts a monthly sweat lodge for students.

Photo credit: Aboriginal Cultural and Support Services

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INDIGENOUS WORLDVIEWS

Indigenous Worldviews and the Notion of Reciprocity

Indigenous worldviews and ways of being can have profound influences on how sustainability is understood and practiced. Further, major sustainability challenges impact Indigenous communities and Indigenous communities have been leaders on the frontlines of protecting ecological and human health. Principles akin to sustainability have been practiced in many Indigenous communities long before the term sustainability entered popular discourse.

A worldview is the collective conceptual outlook of a culture and it is the common property of the culture's members. To open our minds to other ways of knowing sustainability, talking circles were convened between members of the Ogimaawin-Aboriginal Governance Council, Indigenous students, members of the University's Elder's Council, and with Indigenous faculty and staff designated by the Office of Aboriginal Initiatives. During these talking circles, participants discussed the limitations of the word "sustainability" which is often narrowly defined as finding environmentally responsible ways to continue economic development as long as possible.

It is important to note that like all worldviews, Indigenous worldviews are not static, but evolving and changing in the context of the globalized world. Like all worldviews, Indigenous worldviews throughout the world differ from one another based on their unique sense of place; nonetheless one commonality is that they are often relational in nature. For example, the Anishinaabeg recognize the interconnection and interdependence of all living things. Like a spider's web, when one string is tugged in an ecosystem, all others resonate. This concept is represented in the Anishinaabeg protocol "All my relations" that expresses that we are all related and must be respectful to these inter-relationships (Bell, 2013).

The notion of "reciprocity" perhaps suggests a more holistic outlook than "sustainability." Reciprocity invites each one of us to live in relationship with the land, or in the words of Pottawatomi scholar and author Robin Wall Kimmerer, to be "partners in renewal" (2014). Kimmerer says the concept of reciprocity is founded not on what more we can ask of the Earth and its inhabitants, but rather, what we can give back. This shift in emphasis calls upon humans to recognize the personhood of all living things as living beings, and in doing so, consider them as voices equal to ours. In Anishinaabeg worldviews, humans are not exceptional, but are of equal value to other living beings from which they can also learn (Kimmerer, 2014).

To live in a reciprocal relationship with the Earth, we must know the language of our place. In the words of Indigenous scholar Gregory Cajete (2000): [First Nations] peoples through long experience and participation with their landscapes have come to know the language of their places. In learning this language of the subtle signs, qualities, cycles and patterns of their immediate environments and communicating with their landscapes [First Nations] people also come to know intimately the "nature" of the places which they inhabit. Learning the language of place and the "dialects" of its plants, animals, and natural phenomena in the context of a "home-land" is an underlying foundation of Native science. (p. 284)

We recognize that Indigenous worldviews move us towards a deeper notion of sustainability, which is especially important given that popular notions of sustainability have been formulated by white settlers with Eurocentric worldviews. If we are to embrace a form of sustainability that upholds tenets of social justice and equity, then it is necessary to learn from Indigenous nations. Given the history of our country, and even the framework of our institution, doing so is not without its challenges; it will take time, willingness to listen and engage, and radical change. But change is possible, and considering the stresses on Mother Earth at present, imperative.

References

Cajete, G. (2000). Native science: Natural laws of interdependence. Santa Fe, N.M: Clear Light Publishers.

Kimmerer, R. W. (2014). Returning the gift. Minding Nature, 7(2), 18-24.

Bell, N. (2013). Anishinaabe Bimaadiziwin: Living spiritually with respect, relationship, reciprocity, and responsibility. In A. Kulnieks, D. Longboat, & K. Young (Eds.), Contemporary studies in environmental and Indigenous pedagogies: A curricula of stories and place (pp. 89-109). Rotterdam, Netherlands: Sense Publishers.

Limitations

Holding both Indigenous and Western worldviews nurtures the development of new ways of thinking about sustainability. It also has its limitations.

We acknowledge that some worldviews can contradict, or in the case of Indigenous worldviews and the impact of settler-colonial histories, dominate others. We acknowledge that this Plan was largely developed in the context of a Western, Eurocentric worldview. However, we are committed to finding ways for both Indigenous and Western worldviews to complement and strengthen one another in our approach to sustainability. This is an ongoing conversation that demands, at times, uncomfortable conversations and individual and community discernment. It is also a conversation that extends the opportunity for all of us, human, and more-than-human, to be "partners in renewal." Over the five year span of this Plan, we look forward to continuing this conversation with Elders, Métis Senators, traditional knowledge keepers, and Indigenous Peoples.

Acknowledgements

The Office of Sustainability would like to extend a warm and heartfelt thank you to the following people for their contributions to this section of the Plan: Indigenous faculty, administrators, staff, and students, members of the Elders Council, and members of the Ogimaawin-Aboriginal Governance Council who participated in this process.

The Office of Sustainability also thanks the Sustainability Stewardship Council, its Working Groups, and all faculty, staff, students, and community members who participated in the process of developing the Plan as a whole.

Miigwetch!



Lakehead University Elders Council member and Elder-in-Residence, Beatrice Twance-Hynes of Biigtigong Nishnaabeg First Nation, leads a drumming circle at the annual Fall Harvest hosted by Aboriginal Cultural and Support Services.

Photo credit: Aboriginal Cultural and Support Services

Lakehead University Elders Council member, Elder Charlotte Kwandibens of Waswanipi First Nation, cooking goose over an open fire at the annual Fall Harvest hosted by Aboriginal Cultural and Support Services. INT

Photo credit: Aboriginal Cultural and Support Services

Sustainability Plan: Executive Summary

GOVERNANCE FRAMEWORK



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SUSTAINABILITY PLAN

Office of Sustainability

The Office of Sustainability was launched in 2015. It focuses on integrating the interconnected sectors of sustainability - Academics, Engagement, Operations, and Planning and Administrationistration - into the university. As shown in the governance framework diagram, the Office of Sustainability is the administrative body that works to connect and support the Lakehead University Sustainability Stewardship Council and the Sustainability Executive Advisory Committee. The Office of Sustainability is led by the University Sustainability Coordinator.

Sustainability Coordinator

The Sustainability Coordinator nurtures a culture of sustainability at the university in all of its functions and operations. The Coordinator works collaboratively with all types of employees at the university including senior administration, faculty, staff, and students to plan, develop, and facilitate existing and new sustainability efforts.

Lakehead University Sustainability Stewardship Council (LUSSC)

LUSSC provides a forum for students, faculty, administration, LUSU, and the community to create Lakehead University's unique sustainability profile by examining key sustainability issues and developing and implementing a Sustainability Plan for both the Thunder Bay and Orillia campuses.

Sustainability Executive Advisory Committee (SEAC)

SEAC provides institutional support for the Office of Sustainability, the Sustainability Stewardship Council, and Working Groups and is composed of the Provost, the Vice-President of Finance and Administration, the Vice-President of External Relations, the Vice-President of Research and Innovation, the Principal (Orillia Campus), and LUSU, along with other members appointed by the Provost.

Methodology for the Sustainability Plan

The LUSSC spent its first operating year developing a Sustainability Plan for the University. This plan was deeply influenced by the Sustainability, Tracking, Assessment, and Rating System (STARS), developed by the Association for the Advancement of Sustainability in Higher Education (AASHE). STARS is an international, peer-reviewed, voluntary, and public self-reporting framework. In 2014, under the direction of the Centre for Place and Sustainability Studies, the STARS sustainability assessment was completed for both campuses. The recommendations that came out of this assessment provided the backbone for the plan.

Four **Working Groups** of the LUSSC were struck, reflecting the main categories of the STARS assessment: **Academics, Operations, Engagement, and Planning and Administration**. Working Groups developed and implemented relevant portions of the plan that were then brought back to the entire LUSSC and the SEAC for further discussion and refinement, ensuring the process was participatory and democratic.

To open our minds to other ways of knowing sustainability, talking circles were convened between members of the Ogimaawin-Aboriginal Governance Council, Indigenous students, members of the University's Elders Council, and finally, with Indigenous staff and faculty designated by the Office of Aboriginal Initiatives.

The Plan covers a variety of recommendations in the following categories: **Curriculum, Research, Grounds, Dining Services, Energy, Waste, Water, Campus Engagement, Public Engagement, Coordination, Two-Eyed Seeing, and Investment**. While there is currently no active Working Group for Planning and Administrationistration, this is an area that will also need attention; some issues pertaining to Planning and Administrationistration are currently being addressed by the Sustainability Executive Advisory Committee.

To ensure accountability and measure progress, Working Groups will conduct an informal assessment annually to review progress and highlight areas of priority. Working groups are charged with identifying key players for each strategy.

We will continue to seek the counsel of Indigenous Elders, faculty, and staff during the implementation of this Plan.

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The following is a summary of the recommendations:

Curriculum

- Utilize campus grounds, infrastructure, and operations as living environments for multidisciplinary learning, applied research, and practical work that will advance sustainability on both campuses.
- Offer sustainability courses and include sustainability in courses across the curriculum.
- Assess the sustainability literacy of students, faculty, and staff.
- Offer sustainability-focused immersive experiences.
- Where possible, increase the number of programs that include a focus on sustainability.

Research

- Formally track faculty research on sustainability topics.
- Implement program(s) to encourage and support students conducting sustainability research.
- Implement program(s) to recognize and support faculty members across all disciplines who are conducting sustainability research.
- Provide open access to scholarly articles, theses, and dissertations related to sustainability by faculty, staff, and students.

Grounds

 Create a landscape management plan, and biodiversity management strategy designed to identify vulnerable ecosystems and species on campus and prevent, manage, and/or remediate damage to natural habitats and sensitive natural areas.

Dining Services

 Continue to increase support of sustainable food systems through food and beverage purchases, minimize the purchase of conventionally produced animal products, and continue to mandate vegetarian and vegan options in dining services operations.

Energy

• Reduce energy usage in campus buildings and support renewable sources.

Waste

• Increase diversion of materials from landfills and incinerators, and conserve resources by recycling and composting.

Water

• Implement policies and programs to reduce rainwater (i.e., stormwater) runoff and resultant water pollution, and treat water as a resource rather than as a waste product.

For more information, please contact the Sustainability Coordinator at:

coordinator.sustainability@ lakeheadu.ca

Campus Engagement

- Assess the sustainability culture of the campus community.
- Produce outreach materials and publications that enhance student learning about sustainability outside of the formal classroom.
- Include sustainability in student orientation activities and programming, and address sustainability issues during new employee orientation.
- Develop co-curricular programs and initiatives that contribute to students learning about sustainability outside of the formal classroom.

Public Engagement

- Develop campus-community partnerships to advance sustainability.
- Provide continuing education courses and programs in sustainability to the community.

Coordination

• Continue to dedicate resources to sustainability coordination.

Two-Eyed Seeing

• Continue to recognize the importance and value of Indigenous ways of knowing and how they influence the University's understanding of sustainability.

Investment

• Make investment decisions that promote sustainability.



Curriculum 1

Utilize campus grounds, infrastructure, and operations as living environments for multidisciplinary learning, applied research, and practical work that will advance sustainability on both campuses.

STRATEGY

 Build a working "wish list" from various stakeholders on campus, including Physical Plant, to be used as potential research projects (e.g. Emerald Ash Borer assessment and treatment plan, guided nature trail, waste audit).

Ensure diversity in topics to cover various areas of sustainability, including: energy, grounds, water, coordination, planning and governance, diversity and affordability, campus engagement, air and climate, buildings, dining services, purchasing, transportation, waste, health, wellbeing and work, investment, and public engagement.

ACTIONS

1.1 Create invitation/form to distribute to Deans/Communication Bulletin for staff and faculty to submit project ideas.

1.2 Identify administrators (Chairs/Deans/ Directors) and faculty interested in specific projects. Ensure project ideas are diverse by soliciting ideas from all Faculties and Departments.

1.4 Explore possibility of creating a sustainability-focused research course open to all students and/or Facultyspecific courses. Identify possible instructors.

1.5 For special topics courses, draft a syllabus and form that could be used by all Faculties/Departments. Create processes for students to apply and forms/contract that outline expectations. Publicize to recruit students.

Curriculum 2

Offer sustainability courses and include sustainability in courses across the curriculum.

ST	RATEGY	ACT	IONS
1.	Create an inventory of sustainability- focused courses as well as other courses that include sustainability topics.	1.1	Define sustainability-focused and related courses
		1.2	A WG representative from each Faculty/Department meet with Chairs/ Directors to determine all sustainability- focused and -related courses in their respective units.
		1.3	Collate data into a user-friendly, searchable database on SSC website.
		1.4	In future years, request list of retired or new courses annually. Every several years, rerun the inventory process to completely update data.
2.	2. Increase the number of courses that include sustainability, and increase the number of disciplines that incorporate sustainability.	2.1	Ensure the Academic Working Group participates in Academic Planning processes. Request a specific meeting of the SSC and the Academic Planning Committee. Ask WG members to also participate as individuals.
		2.2	Use data from inventory to identify gaps in courses offered and, in the long-term work to ensure each Department has at least one sustainability course.
3.	Provide on-going support for faculty to develop new sustainability courses and/or incorporate sustainability into existing courses.	3.1	Create a forum for faculty to share resources.
		3.2	Offer incentives for new course development (e.g. release time and/or funding for professional development).

City of Orillia Community garden plots located at Orillia Campus. Any member of the public or Lakehead University is able to register for a plot, access seeds from the Lakehead University or City of Orillia seed libraries, and grow their own food.

Photo credit: Allysha Wassegijig



Curriculum 3

Assess the sustainability literacy of students, faculty, and staff.

STF	RATEGY	ACT	IONS
1.	Conduct a university-wide sustainability literacy assessment of students, faculty, and staff.	1.1	Gather other sustainability literacy assessment tools. In consultation with WG and any other experts, draft tool.
		1.2	Consult with institutional planning regarding logistics.
		1.3	Deliver tool online to students, faculty, staff.
		1.4	Consider incentives for survey.

Curriculum 4

Offer sustainabilityfocused immersive experiences.

ST	STRATEGY				
1.	Compile a list of existing sustainability- focused immersive experiences already offered to students (e.g. co-op, internships, field courses, servicing learning, community engagement activities).				

NOTE: Some overlap with Curriculum 1

ACTIONS

1.1 Meet with all Department Chairs/ Program Directors and identify current sustainability-focused immersive experiences offered to students in every Faculty.

Curriculum 5

Where possible, increase the number of programs that include a focus on sustainability.

STRATEGY

- Investigate possibilities for interdisciplinary undergraduate and/ or graduate collaborative program(s) that involve a number of Faculty/ Departments and/or a specific School of Sustainability Studies.
- b) Expand land-based field school programming, in partnership with community organizations, where students can learn from and on the land. Consider how this potential programming could connect to the Indigenous Content Requirement.

ACTIONS

- 1.1 Determine what undergraduate and graduate programs currently have substantial sustainability content to identify potential gaps (e.g. an undergraduate program with no graduate program, graduate programs with clear connections but without relevant graduate program).
- 1.2 Convene representatives from units where there is potential for an interdisciplinary program to identify interest, imagine possibilities, and identify program champions.

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Research 1

Formally track faculty research on sustainability topics.

STRATEGY

 Identify faculty who are conducting research related to sustainability (broadly defined and inclusive) to create an inventory that describes this research so that it can assist faculty in working together as well as be communicated to current and potential students and the community.

ACTIONS 1.1 Define sustainability research. 1.2 Go through all faculty profiles and

.2 Go through all faculty profiles and flag faculty engaged in sustainability research and teaching, categorise them according to sustainability pillars or areas (e.g. environmental technology, food).

- 1.3 Send out preliminary survey/question to all University faculty asking to selfidentify as engaged in sustainability related research and teaching.
- 1.4 Based on this information, develop a survey (including potential questions for Curriculum 2 objective) that will be sent to all flagged faculty from both profiles and preliminary survey.

Lakehead Orillia was the first university campus in Canada to achieve Leadership in Energy and Environmental Design, or LEED Platinum status. Pictured here is the Academic Building.



Academics | Curriculum and Research

Research 2

Implement program to recognise and support faculty members across all disciplines who are conducting sustainability research.

STRATEGY

2.

1.

Determine what sorts of support would best enable researchers to	1.1	Ask to meet with Senate Research Committee (or representatives).
conduct sustainability research (e.g. creation of internal research grants or other funding, space, conference travel), investigate	1.2	Create a new internal research grant like the Senate Research Development Fund to encourage faculty members to:
feasibility of different options, and put in place.	a)	conduct sustainability research on LU operations such as energy and water usage, recycling, and campus environments, river plants and wildlife;
	b)	increase research capacity in sustainability-focused research and facilitate faculty members' successful external grant applications.
	1.3	Increase sustainability research knowledge mobilization and visibility by having specific sustainability focused conference travel grant and publication fund.
Ensure that sustainability-focused research, particularly community- engaged and multidisciplinary, interdisciplinary, and transdisciplinary research is understood and recognized within the university.	2.1	Identify any research that is going unrecognized, in what processes, and why, and determine ways to better recognize it going forward.

ACTIONS

Research 3

Implement program to encourage and support students conducting sustainability research.

STRATEGY

1. Create financial support (e.g. research fund, bursary) to encourage graduate and undergraduate student research in sustainability.

ACTIONS

- 1.1 Clearly define what qualifies as research in sustainability.
- 1.2 Identify existing support structures for sustainability research (e.g. labs, centres, departmental budgets) and barriers to accessing (e.g. information, funding, enrolment).
- 1.3 Determine how to use financial support to diminish these barriers. Create student awards/funding, designate a process for administering awards/ funding.

Research	4

Provide open access to scholarly articles, theses, and dissertations related to sustainability by faculty, staff, and students.

ST	RATEGY	ACT	IONS
1. Create a repository of scholarly articles, theses, and dissertations related to sustainability by faculty, staff, and students and make it publicly available.	1.1	Identify what already is in library repository.	
	1.2	Determine if there is a way of flagging sustainability research in repository and, if so, work on doing so.	
		1.3	Link to library repository on SSC website.
	1.4	Link to faculty members doing sustainability work on SSC website.	
	1.5	Encourage SSC members, both faculty and students, to submit materials to library repository.	

What does sustainability mean to you? Photo credit: Ledah McKellar



Sustainability Plan



Making bannock. Photo credit: Aboriginal Cultural and Support Services

Grounds

Create a landscape management plan, and biodiversity management strategy designed to identify vulnerable ecosystems and species on campus and prevent, manage, and/ or remediate damage to natural habitats and sensitive natural areas.

STRATEGY

- 1.a) Conduct an assessment to identify endangered and vulnerable species (including migratory species) with habitats on University-owned or -managed land.
- b) Conduct an assessment to identify environmentally sensitive areas on University-owned or -managed land.
- 2. Create a sustainable landscape management program to manage the grounds that includes plans to protect or positively affect the species, habitats and/or environmentally sensitive areas identified.

For projects related to this section, consider plants with traditional Indigenous uses, as well as plant species beneficial for all living beings (for example, pollinator friendly plants).

	help develop an implementation plan.
1.2	Consult with Academics Working Group and/or community to identify classes and/or students to conduct assessments.

1.1 Consult with a landscape architect to

ACTIONS

- Seek counsel from Elders, Métis Senators, traditional knowledge keepers, and Indigenous Peoples with land-based knowledge.
- 2.1 Gather information during Fall 2017 (include Academic representation) to see what proposals have been put forward already (e.g. Land Stewardship Proposal Plan, tree inventories, Campus Master Plan).
- 2.2 Using the resources as a guide, update the current Master Plan to include data collected in the assessments.
- 2.3 Consider providing sustainabilityrelated training for grounds persons relevant to their positions. For example, training on the benefits of rain gardens, indigenous plants, and natural landscaping techniques that encourage growth of indigenous species.

Operations I Grounds, Dining Services, Energy, Waste, Water, and Transportation

Dining Services

Continue to increase support of sustainable food systems through food and beverage purchases, minimize the purchase of conventionally produced animal products, and continue to mandate vegan options in their dining services operations.

ST	RATEGY	ACT	TIONS
1.	 Ensure dining services purchase food and beverages that are third party verified to be ecologically sound, fair and/or humane. 	1.1	Create an ad hoc committee to implement strategies 1-5.
		1.2	Inventory all food purchased to identify what is third party-verified to be ecologically sound, fair, and/or humane.
		1.3	Identify alternative options for sourcing food that is not currently third-party verified.
2.	Establish the goal of increasing the use	2.1	Establish a definition of "local food."
	of sustainably-based food products to 50 percent (see 2.2). Ensure they are:	2.2	Initiate discussion with local food distributors to assess what the current
a)	Sourced from local community- based producers (directly or through distributors);		market is capable of supplying in an effort to confirm whether a 50 percent goal is attainable.
b)	 Contain raw ingredients (excluding water) that are third-party verified and/ 	2.3	Inventory all food purchased to identify what is locally sourced.
	or locally harvested and produced (e.g. bread made with organic flour or local honey);	2.4	Consult with the Thunder Bay Food Strategy Group to identify best practices in sourcing local food and
c)	Exclude products from Concentrated Animal Feeding Operations (CAFOs), products that have minimal nutritional value (e.g. soda, chewing gum, candies made predominantly from sweeteners), and products from producers that have been convicted of one or more labor law violations within the previous three years.		potential partnerships.

Wild blueberries on Mink Mountain.

Photo credit: Ledah McKellar



Dining Services

Continue to increase support of sustainable food systems through food and beverage purchases, minimize the purchase of conventionally produced animal products, and continue to offer vegan options in their dining services operations.

STRATEGY

3. Establish the goal that conventionally produced animal products comprise less than 30 percent (see 3.2) of the University's total dining services food purchases. Conventionally produced animal products include all food products that contain animal derived (i.e. meat, fish, egg, dairy) ingredients that have not been verified to be sustainably produced.

 Continue to mandate diverse, complete-protein vegetarian and vegan options at all meals in at least one dining facility on campus.

 Continue to provide labels and/or signage that distinguishes between vegan, vegetarian (not vegan), and other items.

ACTIONS

3.1 Establish a definition of "conventionally produced animal products."

3.2 Initiate discussion with local food distributors to assess what the current market is capable of supplying in an effort to confirm whether a 30 percent goal is attainable.

- 3.3 Inventory all meat purchased to identify what is conventionally produced.
- 3.4 Identify affordable alternative options for purchasing sustainable meat if local supply does not meet demand.
- 3.5 Consult with the Thunder Bay Food Strategy Group to identify best practices in sourcing local food and potential partnerships.
- 4.1 Inventory what meals offered are currently complete-protein vegetarian and vegan options at all meals.
- 4.2 Assess gaps in meals offered and create a plan to increase diversity of options.
- 5.1 Consult ad hoc committee to develop a strategy for labeling foods.

In an effort to integrate sustainability into the curriculum, the Office of Sustainability coordinated a waste audit with a 4th year Natural Resource Management Class.

The purpose of the waste audit was to provide Lakehead University's Physical Plant Administrative Office with a detailed understanding of the types and weights of waste material being generated at the cafeteria and the Agora buildings, and to determine whether or not waste materials are being properly sorted.

Photo credit: Ledah McKellar



Operations I Grounds, Dining Services, Energy, Waste, Water, and Transportation

ACTIONS

Energy

Reduce building energy usage and support renewable sources.

STRATEGY

01		ACTIONS
1.	consumption per gross square foot/	1.1 Create an ad hoc committee to further explore strategies for this action item.
	metre of conditioned floor area comparable to the leading universities in Ontario.	1.2 Identify what a "comparable rate" is by researching the energy consumption of other Ontario Universities.
		1.3 Contact other Universities and investigate and identify best practices for reducing building energy use.
		1.4 Conduct a buildings energy audit on campus.
		1.5 Analyse results and develop a proposal and timeline for reducing energy.
		1.6 Consider the feasibility of the following strategies:
		• Building temperature standards;
		Light Emitting Diode (LED) lighting;
		Occupancy and/or vacancy sensors;
		Passive solar heating;
		• Ground-source heat pumps;
		Co-generation;
		 Building recommissioning or retrofit program;
		 Energy metering and management systems;
		 Program to replace energy-consuming appliances equipment and systems with high efficiency alternatives;
		• Energy-efficient landscape design (e.g. the placement and selection of shade trees and windbreaks and the use of vegetation and reflective materials to reduce heat islands);
		Other energy conservation and efficiency initiatives.
2.	Support the development and use of energy from clean and renewable sources.	2.1: Explore best practices in renewable energy at other universities and research what works best for our regions.

Waste

Increase diversion of materials from landfills and incinerators, and conserve resources, by recycling and composting.

OTI		
	RATEGY	ACTIONS
1.	Transition to centralized and standardized waste on both campuses.	1.1 Create an ad hoc committee to further explore strategies 1-4 for this recommendation.
		1.2 Analyse results from 2016 Waste Audit led by Office of Sustainability and NRMT to help develop a strategy for improving recycling.
		1.3 Pilot centralized waste in the CASES building to test feasibility.
		1.4 Develop strategies such as education and awareness campaigns for the University community, and training on proper recycling procedures for maintenance and third party cleaning staff.
2.	Update the type of multi-unit recycling bins and rearrange them to synchronize with consumer behavior.	2.1 Identify areas of concern with regard to recycling and how they can be improved.
3.	Implement institution-wide composting.	3.1 Involve an undergraduate class in conducting a feasibility study for implementing institution-wide composting.
		3.2 Consult with local composting company Eco Depot about possibility of a composting contract.
		3.3 Identify next steps needed to implement composting.
4.	Identify ways to reduce consumption at intake. For example, in tandem with the goal to increase recycling rates, reduce the amount of paper used or increase use of reusable dining ware in cafeterias and conference services.	4.1 Contact other universities and identify best practices.

$\label{eq:constraint} \textit{Operations I Grounds, Dining Services, Energy, Waste, Water, and Transportation}$

ACTIONS

Water

Implement policies and programs to reduce rainwater (i.e. stormwater) runoff and resultant water pollution, and treat water as a resource rather than as a waste product.

STRATEGY

- Use Low Impact Development (LID) practices as a matter of policy or standard practice to reduce rainwater/ stormwater runoff volume and improve outgoing water quality for new construction, major renovation, and other projects that increase paved surface area on campus or otherwise significantly change the campus grounds. The policy, plan, and/or strategies cover the entire campus.
- 2. Adopt a rainwater/stormwater management policy, plan, and/or strategies that mitigate the rainwater runoff impacts of ongoing campus operations and treat rainwater as a resource rather than as a waste product. The policy, plan, and/or strategies address both the quantity and quality (or contamination level) of rainwater runoff through the use of green infrastructure. Though specific practices adopted may vary across the campus, the policy, plan, and/or strategies cover the entire institution.

1.1 Request to be part of the planning committee for updated Campus Master Plan.

NOTE: Conduct this recommendation in tandem with Grounds recommendations.

- 1.2 Identify areas on both campuses where LID would be highly beneficial.
- 2.1 Consult with a landscape architect to help develop an implementation plan.
- 2.2 Consult with Academics Working Group and/or community to identify classes and/or students to conduct assessments.
- 2.3 Gather information during Fall 2017 (include Academic representation) to see what proposals have been put forward already (e.g. Land Stewardship Proposal Plan, tree inventories, Campus Master Plan).
- 2.4 Using the resources as a guide, update the current Master Plan to include data collected in the assessments.

(L-R) Chris Glover, Director of Student Success, Theresa Vandeburgt, LUSU Vice-President Orillia, and Dr. Dean Jobin-Bevans, Principal of Lakehead Orillia, celebrate Lakehead Orillia's decision to go bottled-water free in January 2019.

Photo credit: Jaclyn Bucik



Transportation

Continue to support sustainable transportation systems.

STRATEGY

1. Support sustainable transportation and commuting alternatives for students and employees.

ACTIONS

- 1.1 Participate in a car/vanpool or ride sharing program, and/or offer reduced parking fees or preferential parking for car/vanpoolers.
- 1.2 Participate in a car sharing program.
- 1.3 Implement one or more electric vehicle recharging stations that are accessible to student and employee commuters.
- 1.4 Assess total percentage of employees and students (graduate and undergraduate) that use more sustainable commuting options as their primary means of transportation (e.g. walking, bicycling, vanpooling or carpooling, taking public transportation, riding motorcycles or scooters, riding a campus shuttle).
- 1.5 Develop resource materials to encourage active transportation, such as campus maps of bike paths and parking facilities.

Adam Krupper, former Mobility Coordinator for the City of Thunder Bay, presents a bike rack to the University for outstanding participation in Commuter Challenge.

Photo credit: Ledah McKellar



Sustainability Plan



Milkweed growing in the Braun Building Rain Garden at Lakehead Thunder Bay. This milkweed was not in the ground ten minutes before a monarch butterfly was feasting on its nectar.

Photo credit: Ledah McKellar

Campus Engagement 1

Assess the sustainability culture of the campus community.

Gitigaan. Lakehead Thunder Bay.

The Lakehead University Gitigaan (Ojibwe for garden) is a gathering space for people to share and learn about the significance of traditional plants and to create an awareness of traditional knowledge. It promotes Indigenous presence and community involvement on campus. The garden's development, in the fashion of a medicine wheel, demonstrates a balanced approach to planting and growing, and is also a space for individual reflection and quiet meditation.

Shale from Anemki Wajiw was donated by Chief Peter Collins of Fort William First Nation.

Photo credit: Aboriginal Cultural and Support Services

STRATEGY

1. Conduct an assessment of campus sustainability culture that focuses on sustainability values, behaviors and beliefs, and may also address awareness of campus sustainability initiatives.

NOTE: The assessment has the potential to be merged with the sustainability literacy assessment proposed in the Academics section.

ACTIONS

- 1.1 Research and review other campus sustainability culture surveys.
- 1.2 Consider possibility of merging this survey with other plan recommendations involving surveys.
- 1.3 Connect with Institutional Analysis.
- 1.4 Develop a survey based on research results and test survey with a focus group.
- 1.5 Submit survey to Ethics and Institutional Analysis, identify best time of year and method for distributing survey.
- 1.6 Input survey into a survey instrument (e.g. Survey Monkey).
- 1.7 Locate donations for survey incentives.
- 1.8 Distribute survey to staff, faculty and students. Identify environmentally responsible methods to communicate survey results.
- 1.9 Analyse data for survey, determine how it can shape direction of Engagement Working Group recommendations; identify how to communicate survey results.



Engagement I Campus, Public

Campus Engagement 2

Produce outreach materials and publications that enhance student learning about sustainability outside of the formal classroom.

ST	RATEGY	ACTIONS
1.	Distribute a sustainability newsletter twice a year.	1.1 Research and review other campus sustainability newsletters.
•		1.2 Create a newsletter template. Identify interested and qualified persons to contribute to newsletter.
		1.3 Identify best method for distributing and promoting newsletter.
		1.4 Publish a newsletter in both Fall and Winter term.
2.	 Establish signage that highlights green building features, as well as signage on the grounds about sustainable groundskeeping and/or landscaping strategies employed. . 	2.1 Assess and compile a list of areas on both campuses to develop building and grounds signage.
		2.2 Research options for printing and implementing signage.
·		2.3 Consult with University Signage Committee and Physical Plant.
		2.4 Develop a strategy for implementing signage: for example, prioritize order in which to implement signage, identify key players to recruit for developing content.
		2.5 Create signage content for identified areas, and quality check with Engagement Working Group.
3.	Establish signage that includes Indigenous historic landmarks and recognizes the history of the land, in English and the local dialect. Seek counsel from the Elder's Council on development of signage.	3.1 Develop an ad hoc group with local Indigenous representation to oversee development of culturally relevant signage.

Students enjoy the abundant natural features of Lakehead Thunder Bay, such as the McIntyre River.



Campus Engagement 3

Include sustainability in student orientation activities and programming; address sustainability issues during new employee orientation.

STRATEGY

- Include sustainability prominently in student orientation activities and programming. Sustainability activities and programming are intended to educate about the principles and practices of sustainability. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).
 Cover sustainability topics in new
- employee orientation and/or in outreach and guidance materials distributed to new employees, including faculty and staff. The topics covered include multiple dimensions of sustainability (i.e. social, environmental and economic).
- 3. Develop a sustainability tour for both students and employees.
- 1.3 Develop materials and plans/activities to deliver for orientation (start with one activity).
 2.1 Identify what activities and topics are currently covered in orientation.
 2.2 Consult with HR to identify best approaches to developing new activities and/or topics.

1.1 Identify what activities and topics are

currently covered in orientation.

1.2 Consult with Student Success/LUSU

new activities and/or topics.

to identify best approaches to develop

ACTIONS

- 2.3 Develop materials and plans/activities to deliver for orientations (start with a brochure).
- 3.1 Identify core members interested in developing a sustainability tour of both campuses.
- 3.2 Ensure tour involves various dimensions of sustainability.

Campus Engagement 4

Develop co-curricular programs and initiatives that contribute to students learning about sustainability outside of the formal classroom.

STRATEGY		ACTIONS	
1.	Increase co-curricular sustainability programs and initiatives, with emphasis on:	1.1 Create an ad hoc group to plan and deliver events.	
a)	Outdoor programming that uses campus gardens and green spaces to engage students:	1.2 Begin by planning one event per Fall/ Winter term.	
b)	Conferences, speaker series, symposia or similar events related to sustainability that have students as the intended audience.	1.3 Identify best methods to include programming in Orillia.	
c)	Indigenous land-based tours and learning spaces (both indoor and outdoor) to engage students, including a land acknowledgment walk.		

Public Engagement 1

Develop campuscommunity partnerships to advance sustainability.



STRATEGY

 Develop one or more formal community partnership(s) with school districts, government agencies, non-profit organizations, NGOs, businesses and/ or other external entities, to work together to advance sustainability.

This includes campus-community partnerships that the institution supports (materially or financially) and that address sustainability challenges in the broader community. This may be demonstrated by having an active community partnership that meets one or more of the following criteria:

- a) The partnership is multi-year or ongoing, rather than a short-term project or event;
- b) The partnership simultaneously supports all three dimensions of sustainability, i.e. social equity and wellbeing, economic prosperity, and ecological health.

Effort should be made to ensure the partnership is inclusive and participatory, i.e. under-represented groups and/or vulnerable populations are engaged as equal partners in strategic planning, decision-making, implementation and review.

2. Develop multi-year and ongoing partnerships with Indigenous communities and Elders, cultural knowledge keepers, and Indigenous organizations to work together to advance sustainability.

ACTIONS 1.1 Support and encourage the

- development of the Northwestern Ontario Sustainability Consortium (NORSC).
- 1.2 Explore the potential to partner with organizations on Campus as a Living Laboratory activities

(see Academics: Curriculum 1).

1.3 Investigate and build on existing partnerships.

2.1 Work with the Office of Aboriginal Initiatives to identify opportunities for new partnerships, and build on existing ones.

The annual Fall Harvest hosted by Aboriginal Cultural and Support Services has been a part of Lakehead University's student orientation since 2008.

Photo credit: Aboriginal Cultural and Support Services



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Public Engagement 2

Provide continuing education courses and programs in sustainability to the community.

ST	RATEGY	ACTIONS
1.	Offer continuing education courses that address sustainability.	1.1 Define sustainability-focused and related courses.
		1.2 Consult with Academics Working Group.
		1.3 Inventory all sustainability continuing education courses and identify opportunities for new courses.
		1.4 Consult with the Continuing Education Department on best approaches to developing new courses.
2.	Create at least one sustainability- themed certificate program through its continuing education or extension department.	2.1 Support the development of the Ontario Naturalist Program in Thunder Bay.
		2.2 Create an ad hoc group to explore the development of a new sustainability-themed certificate program (identify potential certificate topics and partners).

Hazelwood Conservation Area. This photo was part of a collection of photos in the LUSU Nature in the North photography showcase.

Photo credit: Kezia Canuel



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PLANNING AND ADMINISTRATION

View from Anemki Wajiw (Ojibwe for Thunder Mountain, also known as Mount McKay). This photo was part of a collection of photos in the LUSU Nature in the North photography showcase.

Photo credit: Helen Otterman

Coordination

Continue to dedicate resources to sustainability coordination.

STRATEGY

- 1.a) Create a part-time Sustainability Coordinator position in Orillia
 - b) Increase operational capacity of the Office of Sustainability

ACTIONS

- 1.1 Consult with the Sustainability Executive Advisory Committee on when and how to increase sustainability budgets.
- 1.2 Prepare job description for Sustainability Coordinator in Orillia and consider how this position will best work in tandem with the Office of Sustainability and the Sustainability Plan recommendations.

Two-Eyed Seeing

Continue to recognize the importance and value of Indigenous ways of knowing and how they influence the University's understanding of sustainability.

STRATEGY

 Organize a process that facilitates and supports ongoing dialogue on the tensions and commonalites between Indigenous and Western worldviews and definitions of sustainability, and their implications.

ACTIONS

- 1.1 Create a co-constructed definition of sustainability with Indigenous Peoples.
- 1.2 Continue to explore how sustainability is connected to Indigenous rights and worldviews, and how this can be demonstrated in sustainability programming and planning.

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Investment

Make investment decisions that promote sustainability.

STRATEGY	ACTIONS
1. Establish a committee on investor responsibility (CIR) with multi- stakeholder representation (e.g. Board of Governors members, faculty, staff, students, alumni) that can make recommendations on socially and environmentally responsible investment opportunities.	1.1 Create an ad hoc group with the Board of Governors, LUSU, and othe stakeholders on next steps for creatin a CIR.

The Sea Lion from below (Sleeping Giant Provincial Park).

Photo credit: Ledah McKellar



Profile of Wiigwasitig Gitigaan - Lakehead Orillia Community Garden during sunrise. Photo credit: Allysha Wassegijig



Sustainability Stewardship Council

For more information or to get involved, visit: **lakeheadu.ca/about/sustainability**

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