

# Sustainability Newsletter



## “TAKING BACK THE TAP”: LAKEHEAD ORILLIA GOES BOTTLED WATER FREE

A sustainability leader from the outset, Lakehead Orillia has decided to ban the sale and distribution of bottled water on its campus. As the first campus in Canada to gain LEED Platinum designation, Lakehead Orillia continues to model sustainable decision-making.

The Vice-President of LUSU in Orillia, Theresa Vandeburgt said, “LUSU had a hand in developing this policy because not only do we strongly believe in cutting down on single-use plastics, but also that water is a human right, not a commodity.” In the summer of 2017 LUSU approached senior administration and the Office of Sustainability with a request for the University to ban bottled water at Lakehead Orillia. For several years prior, LUSU pushed Take Back The Tap, an education and advocacy campaign of Food & Water Watch. During this campaign, they partnered with the University to share the costs of installing several water bottle filling stations on the Thunder Bay campus.



The chilled water bottle filling stations increase accessibility to fresh, clean water, and track how many plastic bottles are diverted. | Photo Credit: Ledah McKellar

**HAVE SUSTAINABILITY RELATED RESEARCH, INITIATIVES, OR NEWS YOU WANT TO SHARE? CONTACT US AT:**

[coordinator.sustainability@lakeheadu.ca](mailto:coordinator.sustainability@lakeheadu.ca)

**EXCEPTIONAL.  
UNCONVENTIONAL.**



**Lakehead**  
UNIVERSITY

Office of  
Sustainability

# Taking Back the Tap



(L-R) Chris Glover, Director of Student Success, Theresa Vandeburg, LUSU Vice-President Orillia, and Dr. Dean Jobin-Bevans, Principal of Lakehead Orillia, fill their reusable water bottles at one of Lakehead's water bottle refill stations. Photo Credit: Jaclyn Bucik

Lakehead University Orillia, in collaboration with LUSU Orillia and the Office of Sustainability, created a bottled water policy, to be in effect starting the first week of classes in January 2019. The policy states the following reasons for going bottled water free:

1. Access to clean, safe drinking water is a basic human right (see The UN Committee on Economic, Social and Cultural Rights, (un.org). Selling water treats it as a commodity, thereby infringing this right;
2. The production of bottled water is not sustainable. A significant amount of energy is required to extract, pump, bottle, transport, and chill bottled water. Further, it takes substantially more than a litre of water to produce a litre of bottled water. See [responsiblepurchasing.org](http://responsiblepurchasing.org);
3. Bottled water creates a considerable amount of waste. While stats vary on the percentage of water bottles that are recycled each year, many find their way to rivers, lakes, and forests where they take centuries to break down.

"As a LEED certified campus, Lakehead Orillia is committed to comprehensive sustainability management and responsible sustainability practices," said Dr. Dean Jobin-Bevans, Principal of Lakehead University Orillia. "It's a positive step in our commitment to enhancing the quality of campus life, and reducing the negative social and environmental impacts of single-use bottled water."

An ad hoc committee was established to develop this policy and includes members from across the University, including LUSU. The group has since morphed to become the Orillia Sustainability Working Group.

The launch of the policy will be led by a hashtag campaign, #BanTheBottleLU, encouraging the University community to hashtag a photo of themselves with a reusable water bottle.

While the policy will not address the sale and distribution of single-use bottled beverages other than water, the Office of Sustainability is pleased to see the University move in this direction and anticipates that talks to consider including the Thunder Bay campus in this policy will occur in the future.



# Sustainability Studies Research Grant

In 2015, and again in 2017, the Office of the Vice-President Research and Innovation demonstrated its ongoing commitment to deepen its role in sustainability stewardship. The Sustainability Studies Research Grant was created to “promote interdisciplinary research activity that leads to finding innovative solutions to sustainability challenges.” This research fund prioritized research projects that:

- Are interdisciplinary;
- Have a relationship to the broad themes of sustainability as represented by the Sustainability Tracking, Assessment, and Rating System (STARS); and
- Involved the community.

In 2017, four research projects were awarded up to \$5,000 each. Two of the projects were showcased in the Fall Sustainability Newsletter and the remaining two are featured here.



# Bikeability & Cyclist Safety

## EXPLORING BIKEABILITY AND CYCLIST SAFETY IN THUNDER BAY

### Researcher: Dr. Lindsay Galway

In 2018, Thunder Bay was granted a bronze Bike Friendly Community Award. This award is granted to communities with programs and infrastructure that encourage cycling as a means of transportation and recreation. A bronze designation indicates that Thunder Bay has made some progress, but there is still work to be done to enhance bikeability and cyclist safety.

Despite this designation, and the fact that cycling is both a sustainable mode of transportation, as well as beneficial to overall health and wellbeing, only 4.4 percent of commuters in Thunder Bay use active transportation as their main mode of commuting.<sup>1</sup> Funded by the 2017 VPRI Research Grant, Dr. Galway's research project "Exploring Bikeability and Cyclist Safety in Thunder Bay" examines the factors that motivate and deter cycling and cyclist safety in Thunder Bay.

The research is an interdisciplinary and collaborative project involving Dr. Galway of whose academic home is the Department of Health Sciences, Adam Krupper, Mobility Coordinator for the City of Thunder Bay, and Joanna Carastathis, who works on Healthy Living with the Thunder Bay District Health Unit, as well as Eve Deck and Katherine Mayer, Masters of Public Health students. This study builds on previous walkability and pedestrian safety research conducted in Thunder Bay.

Data for this study was collected using cyclist interception surveys, conducted at 23 locations across the city. Semi-structured interviews were also conducted with a diverse group of 32 cyclists in Thunder Bay. Preliminary results showed that only one in four cyclists are somewhat satisfied with overall safety while cycling

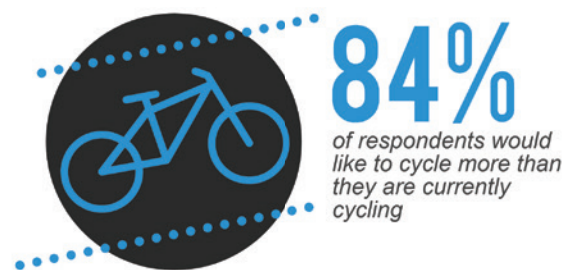


Photo credit: Thunder Bay District Health Unit. (2018) Bikeability and Cyclist Safety in Thunder Bay.

in Thunder Bay. Almost half of survey respondents were strongly or somewhat dissatisfied with the connectivity of the current cycling network and access to key destinations infrastructure. When asked to select the primary reason for cycling, physical health/fitness (58.4 percent) and pleasure/enjoyment (17.7 percent) were the most commonly cited reasons. However, seven out of 10 cyclists reported that environmental benefits, like reduced fossil fuel emissions, encouraged them to ride their bike.

In terms of specific factors affecting perceived safety while cycling in Thunder Bay, the majority of survey respondents agreed that inattentive drivers, the volume of motor vehicle traffic, and the speed of motor vehicles made them feel unsafe while cycling in our community. Additionally most of the survey respondents agreed

<sup>1</sup> See Statistics Canada: Census Profile, 2016 Census for Thunder Bay.

that poor road conditions, including potholes and loose gravel, made them feel unsafe while cycling on the city's roads. The initial results suggest that if a gold Bike Friendly Community Award is ever to be in Thunder Bay's future, driver education about cyclist safety and improvements to Thunder Bay's cycling network and infrastructure are in order. Galway's research suggests that "if we build it they will come." Indeed 84 percent of cyclists reported that they want to cycle more than they currently do. In the words of one research participant, "Without a doubt, the one factor that would get more people on their bikes ... whether it's going to work, or for pleasure.... is bike lanes."

The results from this research will be available in a report that will be made available on the Thunder Bay District Health Unit website in early 2019 and will be used to identify locally relevant strategies to promote cycling as a mode of transportation, including improved safety. The study findings will also inform the Thunder Bay Transportation Master Plan (a document that will guide the City's transportation infrastructure investments and programs for the next 20 years) and Healthy Living programs of the Thunder Bay District Health Unit. In addition, the research and study findings speak to Lakehead University's efforts to improve sustainability based on the Sustainability Tracking, Assessment, and Rating System (STARS) completed in 2014.

For more information on this research study, please contact Dr. Lindsay Galway ([lgalway@lakeheadu.ca](mailto:lgalway@lakeheadu.ca)).



- How convenient and pleasant it is to cycle



- Cyclist safety overall
- Access to key destinations using the current network of cycling infrastructure
- Cycling infrastructure overall
- Connectivity of the current cycling network
- Availability of bicycle parking at key destinations

Photo credit: Thunder Bay District Health Unit. (2018) Bikeability and Cyclist Safety in Thunder Bay.



# Your Lawn & Climate Change

By Mallory Vanier

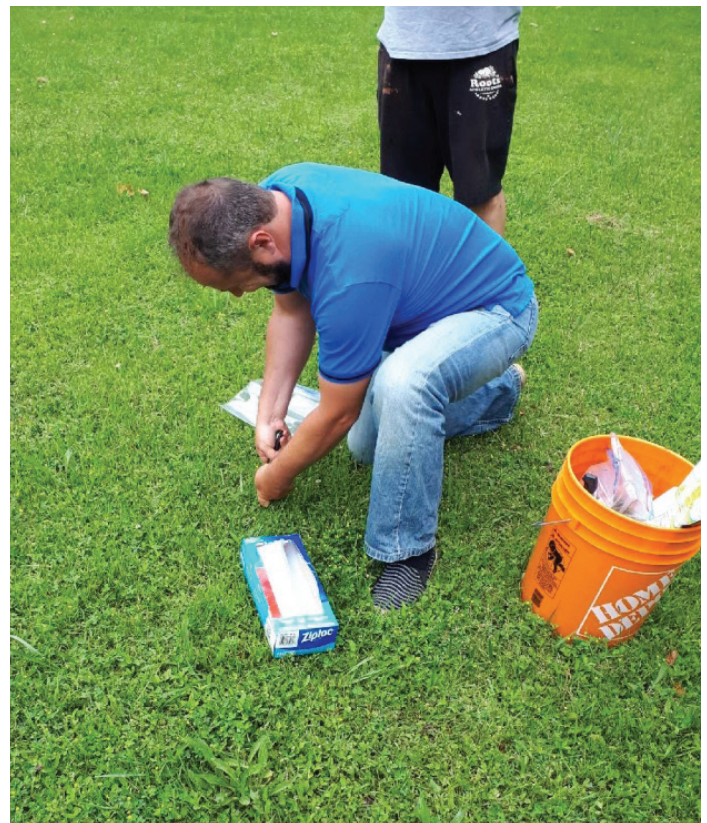
## CAN YOUR LAWN HELP COMBAT CLIMATE CHANGE?

**Researchers: Dr. Florin Pendea and Dr. Nanakumar Kanavillil**

Whether you are in the boreal communities of northern Ontario or the more heavily populated cities of southern Ontario, one constant is the presence of grass-covered lawns. These turf systems vary in size and structure, with some homeowners preferring a manicured and fertilized appearance and others preferring a low-maintenance approach that features dandelions and other “weeds.” Despite the popularity and prevalence of these urban turf ecosystems, relatively little is known about their ability to contribute positively to climate change mitigation.

Dr. Florin Pendea, an Associate Professor in Sustainability Studies at Lakehead University’s Orillia campus, set out to investigate this question in more detail in his project with research partner Dr. Nanakumar Kanavillil “Towards a Carbon-Neutral Sustainable City: Carbon Sequestration in Urban Turf as a Potential Offset for Urban Greenhouse Gas Emissions.” With the projected growth in urban environments in the near future, Pendea believes it is important to investigate the role that these often overlooked urban greenspaces may play in climate change mitigation.

Over the course of a year (one full growing season), Pendea’s team (including two undergraduate students from Orillia’s Environmental Sustainability program)



Dr. Pendea samples soil/biomass from urban turf | Photo Credit: Darren Johnston

sampled soil/biomass from urban turf ecosystems throughout the city. The turf site samples represented a range of management strategies including fertilized/unfertilized systems, frequently/unfrequently trimmed systems, and watered/unwatered systems. Sampled sites also reflected various sun exposure levels and soil types. These samples were then analysed in a lab to determine their carbon sequestration potential.

Preliminary results from this project indicate that non-managed or lightly managed landscapes provide the greatest potential for carbon sequestration among sampled systems. While highly managed systems do have a higher overall yield, their potential to offset carbon is reduced when the impacts of their management strategies are factored in (e.g., fuel and emissions from mowing/trimming, water consumption, negative impacts of fertilizer, etc.). While the results of this study may have important implications for urban climate change mitigation strategies, Pendea underscores the importance of considering these results within the small geographic and temporal context of the study; further study is needed to confirm these results on a larger scale.

One of the aspects of this project that Pendea is most proud of is the participatory nature of the study, especially the interest shown by, and involvement, of the Orillia community. Pendea's team reached out to the community in search of volunteers who would

allow sampling on their property, and the community responded with great enthusiasm. Pendea was particularly struck by the diverse demographics of the participants and the interest they had in this project and climate change in general. A beneficial additional result of this project, then, is the increased awareness of climate change that stemmed from conversations with project participants.

Pendea and his team are currently working on communications for the public to outline the initial results of the project. Publicly distributing the project's findings allows those who participated to learn how their humble yards contributed to this particular research initiative as well as a larger body of climate change research. Those interested in learning more about this project or Pendea's other courses and research can get in touch via email ([ifpendea@lakeheadu.ca](mailto:ifpendea@lakeheadu.ca)), while also staying tuned for the release of these public communications.

# Cigarette Butt Recycling

By Samantha Dewaele

## NO 'IFS', 'ANDS', OR 'BUTTS' ABOUT IT: CIGARETTE RECYCLING STATIONS A SUCCESS AT LAKEHEAD UNIVERSITY



### Cigarette ashtrays on Thunder Bay campus.

As a result of this initiative, 75 gallons of cigarettes have been recycled as of the end of 2018 at Lakehead. Photo credit: Ledah McKellar

University has installed several cigarette butt recycling stations on campus. EcoSuperior recycles the collected contaminants through a company called Terracycle, turning them into shipping pallets and park benches. The ash and tobacco are separated out and composted in a specialized process.

EcoSuperior's cigarette waste collection and recycling program, Your Butt Goes Here, was started in 2015 in an effort to reduce the impact cigarettes have on the environment. Shannon Costigan, the Project Supervisor at EcoSuperior Environmental Programs, hopes that "by drawing some attention to the fact that cigarette butts contain material that can be recovered and recycled, we are hoping people will rethink how they dispose of them." She explains that over a million cigarette butts have been collected and recycled through the program to date.

The success of three initial pilot stations has led to the ongoing installation of cigarette recycling ashtrays at all the designated smoking areas on Lakehead's campus. Costigan explains that the goal is to "spread the message that Lake Superior is not an ashtray." With the success of these first few stations, Lakehead University is off to a great start.

It is well known that cigarettes have an adverse effect on our bodies, but what about the health and wellbeing of the planet? Despite their small size, the millions of cigarette butts dropped on the ground each year are a major contaminant of Lake Superior. The toxins they contain, including cancer-causing nicotine, carbon monoxide, hydrogen cyanide, ammonia, arsenic and vinyl chloride, don't just wash away. Instead, they are absorbed into our waterways, and that pollution stays in our environment indefinitely.

The Sustainability Stewardship Council's Operations Working Group, in collaboration with the Office of Sustainability, Physical Plant, Residence, and LUSU, has been working on an alternative to traditional ashtrays. Thanks to a partnership with EcoSuperior, Lakehead



# Two LEEDing Campuses

## SUSTAINABILITY FROM THE GROUND UP: TWO LEEDING CAMPUSES

### ORILLIA SPOTLIGHT

Lakehead University's commitment to sustainable building began with its Orillia campus. Designed to be built at the highest of environmental standards, it was the first university campus in Canada to achieve LEED Platinum status. Leadership in Energy and Environmental Design, or LEED, claims to be the highest green building rating system in the world, with platinum being their highest designation.<sup>2</sup>

According to the Canada Green Building Council, "Buildings generate up to 35 percent of all greenhouse gases, 35 percent of landfill waste comes from construction and demolition activities, and up to 70 percent of municipal water is consumed in and around buildings."<sup>3</sup> Given that the Orillia campus is home to sustainability-focused academic programming, including the Sustainability Science Department, the Certificate in Environmental Sustainability, and the Ontario Master Naturalist program, the commitment to LEED Platinum aligns operational and academic standards of sustainability. A campus infrastructure that reflects the curriculum that its students are being taught demonstrates congruence through sustainability in action.

As a result of Lakehead's commitment to the Orillia buildings, the Sustainable Building Policy was created, projecting all future builds on the Orillia campus to work to LEED Platinum standards. In Thunder Bay, which has the challenges of a preexisting campus, including buildings and other infrastructure over 50 years old, the goal will be LEED Gold.



The Academic Building at the Orillia Campus.

Lakehead Orillia has a modest demeanor; if you were to take a walk around the Orillia campus, you might unknowingly pass by a number of sustainable features as most are not marked. So what makes its campus LEED Platinum?

Here are some of the highlights reported by Moriyama & Teshima Architects<sup>4</sup>:

<sup>2</sup> To certify in one of the four LEED levels, a building must be designed to specific environmental criteria, and report on the implementation of these criteria during the construction phase. Follow-up testing is completed to prove the building is performing the way it was designed.

<sup>3</sup> For more information, visit CGBC online.

<sup>4</sup> The following information was taken from the report by Moriyama & Teshima Architects; see [mtarch.com](http://mtarch.com).



117 boreholes were drilled 330 ft down to create the geothermal system  
Photo credit: Moriyama & Teshima Architects

## Geothermal

A vertical ground loop system extracts heating and cooling from the earth by way of central heat pumps. These pumps then boost the temperature of the ground to a useful temperature for heating and cooling. As the ground maintains a steady and mild temperature, the efficiency of the heat pumps improves. This system helps the Academic Building to be 50 percent more energy efficient than a typical building of this type and size.

## Bioswales

Bioswales are landscape elements designed to remove silt and pollution from surface runoff water. They consist of a swaled drainage course with gently sloped sides and filled with vegetation. The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Biological factors also contribute to the breakdown of certain pollutants. A common application is in parking lots, where substantial automotive pollution is collected by the paving and then flushed by rain. The bioswale treats the runoff before releasing it to the watershed or storm sewer.

## Materials and Resources

More than 56 percent of the construction materials in the Academic Building were extracted and manufactured regionally, thus strengthening the University's link to the community and minimizing the project's carbon footprint.

The feature stone wall consists of Algonquin and Eramosa limestone, locally quarried and manufactured. The stone adds a layer of scale, rhythm, and texture to the overall building design, emphasizing unique elements of the Canadian landscape.

## Dual Duct Dedicated Outdoor Air VAV System

This system utilizes two parallel air distribution systems: one for delivering ventilation air only, and one for cooling on an as-needed basis. This allows for greater effectiveness and lowers the required quantities of ventilation air while maintaining high air quality. The second system provides space cooling only when needed, allowing for the quality and energy saving benefits of a traditional dedicated outdoor air system with central equipment for easy maintenance.

## Stormwater Management Pond

A poured concrete surface pond contains a growing medium for plants and provides a home for beneficial microorganisms which clean and filter storm water.



Photo credit: Moriyama & Teshima Architects, Orillia bioswale

that enters the pond through an oil grit separation system below grade. Water is circulated up through the surface pond for water cleansing and oxygenation via plant material. This system can hold five to seven days worth of water for the building's grey water recirculation system. It also provides quantity control of the post-development surface water run-off to pre-development levels.



## Light and Air

Natural light, excellent air quality, and connection to the outdoors were prioritized to enhance user experience and sustainability. Tall windows allow natural light into the Academic Building's rooms, while remaining within the 30 percent building envelope opening limit to help control energy demands. Motorized blinds, occupancy sensors, and dimming controls have been installed, as well as controls for air-flow, temperature, and lighting, which allow user control over the environment, thereby improving user satisfaction and productivity.

## Site Ecology

Native plantings have been used where possible. Adaptive and drought-tolerant species have been selected to minimize the need for supplemental watering.

## Life Cycle Considerations

The Academic Building is designed for a 'long life' and is adaptable to current and future needs through a simple structural grid, 'loose-fit' ceiling spaces, clear organization of spaces and circulation, and interior partitions that are easy to change with no major services within walls. Materials and systems were chosen and detailed with a focus on low maintenance.

## Green Roof

50 percent of roofing incorporated to control stormwater runoff, reduce heat island effect and reduce building cooling loads.

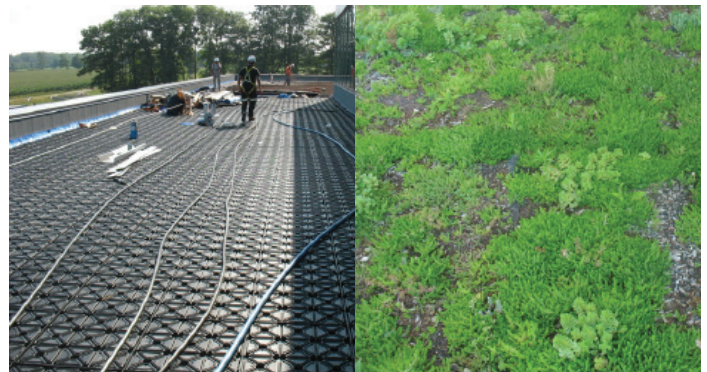


Photo credit: Moriyama & Teshima Architects, Orillia green roof

## Bicycle Storage and Changing Rooms

Reduced automobile transportation strategies included supplying bike racks and showers for building users, negotiating to extend bus transit to the campus, limiting parking capacity to just meet by-law requirements, inclusion of carpool spaces in preferred locations for building occupants, and the university has an online carpool site.

Built with sustainability in mind from the outset, the Orillia campus modeled sustainability for the University, and set that standards for new builds in Thunder Bay. Following in their "LEED," the newest build on Thunder Bay's campus will follow in Orillia's footsteps.





Photo Credit: Ledah McKellar

## THUNDER BAY SPOTLIGHT

The first major build since Lakehead Orillia, the Centre for Advanced Studies in Engineering and Sciences (CASES) building is projected to meet LEED Gold standards. Funded by federal, provincial, and municipal dollars, it is the first official green building on Thunder Bay's campus. The building is a retrofit of the former Centre for Northern Forest Ecosystem Research (CNFER), along with a 20,000 square foot addition.

The bright, modern building has a host of sustainable features. The following information was retrieved from i4architecture's<sup>5</sup> design brief:

### Enhanced Daylighting

Similar to Orillia's Academic Building, the CASES building is designed with the ability to turn lights off purposely. Enhanced daytime lighting reduces the need for artificial lighting until necessary. The abundance of natural light also creates a warm atmosphere, promoting health and wellbeing and ample viewing to the outdoors. The window design creates the conditions for passive solar heating which reduces reliance on energy. During the summer season, blinds are in place to help reduce

heat gain or discomfort and prevent overheating. The existing atrium was incorporated into the design, bringing natural light onto both the core and subground floor of the building. The building is also equipped with LED and motion sensed lighting.

### The Old With The New: Building Materials and Indoor Air Quality

i4architecture designed the building so that: "The materials, finishes, and colors will extend between the existing building and new addition, creating a seamless integration of interior spaces." For example, in the centre of the subfloor, the brick of the old building transitions into wood where the new building begins.

Materials for the building were chosen for their environmental sustainability, quality, durability and recycled content or ability to be recycled at the end of their expected life. To meet this standard, materials had low embodied energy and no-to-low volatile organic compounds. Essentially, this means that products were chosen based on the criteria that they will not release harmful compounds that could disrupt allergies or indoor air quality. This applies to materials like drywall, paint, plastic laminate counters, furniture, sealants,



Photo Credit: i4architecture, CASES graduate studies lounge

<sup>5</sup> For more information on i4architecture, see <http://i4a.ca/>.



Photo Credit: i4architecture

flooring material, and the construction materials that are contained within the walls.

The design uses as much wood as possible, including an exposed wood structure on the inside. Wood is used where possible because it is a renewable product and trees are a great benefit to the environment. The boreal forest is often referred to as the “Lungs of the Earth” because it sequesters a large portion of the world’s carbon. The use of wood, though integrated throughout, was limited due to the classification of the building as non-combustible. The metal studs used in the walls are made from recycled steel, and the insulation used was made from recycled jeans. According to Bailey Metal Studs, the overall recycling rate of steel products in North America is approximately 66 percent, the highest rate of any material, and steel products can be recycled repeatedly without degradation or loss of properties.

### Energy Efficiency and Plumbing

The building uses heat recovery exhaust systems, low-flow plumbing, and is connected to the University’s efficient central hot water heating system.

### Active Transportation

Roofed bike shelters promote the use of alternative means of transportation during extended lengths of the season. In inclement weather--yes even in winter--people can cycle because their bikes are protected from the elements. There are also showers in the basement floor to increase comfortability of walking or cycling to work. Cycling promotes health and wellbeing as well as a sustainable method of transportation unreliant on fossil fuels.



Photo Credit: i4architecture

### Stormwater Management

A move away from most campus buildings constructed in the 1960s and 1970s, the CASES building features low impact stormwater management landscaping that aims to divert stormwater from the storm system whenever possible. The building is collecting roof and ground stormwater and distributing it into the ground. In the event of an unexpected or extreme weather event, an overflow is in place that connects to the storm sewer system in order to avoid damage to the building.

The landscaping features indigenous, drought tolerable plants. Since all stormwater on campus flows into the McIntyre River, the landscaping in this design helps filter pollutants and slow down the rate of the runoff, protecting the long term health of the watershed and mitigating flooding.



Photo Credit: Ledah McKellar

### Accessibility

The building has an all-gender washroom, and a universal access washroom that features a power door, barrier-free toilet and sink, turning space to accommodate a wheeled mobility device, and an adult and infant changing table.



Photo Credit: Ledah McKellar, CASES labyrinth

### Health and Well-being

A labyrinth was constructed on the grounds adjacent to the south side of the building to encourage contemplative and mindfulness practices. The labyrinth is a walking, meditative path with twists and turns that mimic those that we may experience on our own life journey. It encourages the walker to slow down and reflect.

### Access to Clean Water

There are several chilled water bottle filling stations in the building, encouraging users to avoid single-use plastic.

Both Lakehead Orillia and the CASES building at Lakehead Thunder Bay demonstrate Lakehead University's ongoing commitment to sustainability. Given the high impact of buildings on the environment, this is a welcome trend.



# Seeking Climate Justice

By Mallory Vanier

## KELSEY JULIANA: YOUTH AND THE FIGHT FOR CLIMATE ACTION



Photo Credit: Robin Loznak, Our Children's Trust

"I believe that climate change is the most pressing issue my generation will ever face, indeed that the world has ever faced. This is an environmental issue and it is also a human rights issue."

The conviction of this statement and the poise with which it was delivered might lead you to believe that it was spoken by a political leader or a prominent climate researcher. In fact, these strong words were spoken by 22-year-old student and activist Kelsey Juliana. On September 19th, Juliana travelled from her hometown in Oregon to Thunder Bay to speak to the Lakehead community about climate change and climate activism.

Juliana is the lead plaintiff alongside 20 other youth from across the United States in the groundbreaking lawsuit *Juliana v. United States*. Their suit claims that the federal government's support of major climate change contributors and their overall inaction on climate change has significantly impacted the constitutional rights of the youth appellants. Our Children's Trust, a not-for-profit legal organization, is representing and supporting these youth throughout the legal proceedings.

In addition to discussing the legal proceedings, Juliana dedicated a significant portion of the presentation to fielding questions from a captivated audience. With a diverse audience of approximately 150 faculty, staff, students, and community members, Juliana answered a range of questions about the current climate crisis and climate activism, referring to issues and initiatives in North America and around the globe. Among the audience were approximately 30 Grade 7 and 8 students from Westmount Public School. This engaged group of students asked some of the most pressing and practical questions, seeking advice from Juliana on how to get involved in climate activism and make a positive contribution to their community, even at a young age.

Although it can be easy to feel overwhelmed or distressed when discussing a heavy and complex topic like climate change, Juliana's message at Lakehead was clear: hope and action (particularly among youth) are some of our most powerful tools for tackling climate change. Juliana ended her presentation by playing a climate activism song that brought together the ideas of youth, culture, community, hope, and action that she drew upon throughout her talk. Her passion for climate activism and hope for the future were heartfelt and contagious, leaving members of the audience more inspired and motivated than when they arrived.

During the September presentation, Juliana noted that the trial would begin on October 29th, 2018. However, motions filed by the United States Federal Government in October and November have delayed the trial past this original start date; at this time, there is no date for when the trial will take place. A full summary of this landmark lawsuit, including motions, delays and other updates can be found at [www.ourchildrenstrust.org/us/federal-lawsuit](http://www.ourchildrenstrust.org/us/federal-lawsuit)

**VISIT [LAKEHEADU.CA/ABOUT/SUSTAINABILITY](https://lakeheadu.ca/about/sustainability)**



**LIKE US ON FACEBOOK:**  
**[FACEBOOK.COM/LAKEHEADSUSTAINABILITY](https://facebook.com/lakeheadsustainability)**

**HAVE SUSTAINABILITY RELATED RESEARCH,  
INITIATIVES, OR NEWS YOU WANT TO SHARE?  
CONTACT US AT:**

**[coordinator.sustainability@lakeheadu.ca](mailto:coordinator.sustainability@lakeheadu.ca)**

**EXCEPTIONAL.  
UNCONVENTIONAL.**



**Lakehead**  
UNIVERSITY

Office of  
Sustainability