University of Saskatchewan Campus Sustainability Tour



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Questions and Comments can be sent to **sustainability@usask.ca**

or feel free to contact our Community Engagement Co-ordinator at (306) 966-2200

For group sustainability tour bookings, please contact Matt Wolsfeld at matt.wolsfeld@usask.ca

U of S Campus Sustainability Tour

Situated on the banks of the beautiful Meewasin River Valley and originally founded as an agricultural college amidst the rich prairie landscape, the University of Saskatchewan owes much of its success to the environment that has helped make it one of the most appealing campuses in Canada. The university recognizes that sustainability in all aspects is the only responsible attitude to take in order to preserve the beauty, productivity, and health of its surrounding environment and the people that call it home.

This guide will help you tour the University of Saskatchewan campus and discover the sustainability initiatives that are helping to reduce the university's environmental impact while enabling its staff, students, and faculty to engage in sustainable life choices. Discover what you can learn from a native prairie garden, learn about campus amenities for cyclists, or take in the sights, smells and tastes of our community gardens and local food options; the opportunities to see how the U of S is striving to become more sustainable are all around us.









Campus Map

The intention of the Campus Sustainability Tour is to help our campus community understand the ways in which the University is helping to preserve our environment and enable staff, students, and faculty to engage in sustainable life choices.

The tour should inspire curiosity, and we encourage you to explore campus in the way that feeds your individual curiosity. We have ordered the stops on this booklet in a way that might be convenient, but this is by no means the only way to see these places. Feel free to wander in any direction that piques your interest, skip stops, add additional stops, or just use this guide to help you interpret campus in your everyday life.

Happy Adventuring!

North & Central Campus

- 1. Office of Sustainability
- 2. USB Community Garden
- 3. Rainwater Collection Tank
- 4. Campus Compost
- 5. North Road Paving Project
- 6. Plugging In Efficiently
- 7. Energy & Water Retrofits
- 8. Prairie Habitat Garden
- 9. Meewasin Valley Authority
- 10. Law Addition
- 11. Law Living Roof
- 12. Native Law Centre
- 13. Health Science D-Wing
- 14. Health Science E-Wing
- 15. SENSSA Community Garden
- 16. Bike Repair Kit
- 17. University Club Herb Spiral
- 18. Louis' Campus Pub
- 19. U-Pass & UCommute
- 20. Place Riel Student Centre
- 21. USSU Sustainability Committee
- 22. Murray Library

- 23. Art*Cycled
- 24. Gordon Oakes Red Bear Student Centre
- 25. Arts Tower Edible Garden
- 26. Bike Repair Stand
- 27. Big Belly Solar Compactor
- 28. Marquis Hall
- 29. Sustainable Grounds Management
- 30. John Mitchell Solar Panels
- 31. Agriculture Centennial Edible Garden
- 32. Agriculture Rooftop Garden
- 33. Bike Lockers
- 34. Collaborative Science Research Building
- 35. Campus Recycling Program
- 36. Re-Use It Bin

South Campus

- 37. Horticulture Club Garden Project
- 38. Horticulture Solar Panels
- 39. McEown Place Community Garden
- 40. Aspen & Spruce Hall Solar Panels

North & Central Campus



South Campus



Sustainability Tour



Office of Sustainability **University Services Building**

The University of Saskatchewan's Office of Sustainability works on sustainability-related opportunities and challenges on campus. Its primary mission is to build a sustainable campus through community engagement and collaborative action.

USB Community Garden University Services Building

Established the summer of 2014, this small community garden provides University Services Building staff with an opportunity to grow vegetables and celebrate the summer season as a community.



Rainwater Collection Tank

University Services Building

Using a massive 4,500 litre tank, rainwater is collected from the roof of the University Services Building. The water is then transferred to a truck and is used on landscaped areas around campus.

Campus Compost North Campus

By composting more than 90% of campus leaves and grass clippings, the university saves \$15,000 annually by not sending truckloads of this "waste" to the landfill. The university also composts coffee grounds, and is exploring options or composting campus food waste.

North Road Paving Project

Innovation Blvd

The North Road was reconstructed using sustainable methods including the use of salvaged road rubble, crushed concrete, glass, and porcelain to produce a green and durable product. Asphalt in one section was applied using a less energy-intensive cold process, while permeable pavement—which allows storm

water to infiltrate through the pavement to significantly reduce water runoff—was applied to another section.

Plugging In Efficiently Education Parking Lot

The U of S has approximately 1600 parking lot controllers on campus. Similar to a standard outdoor electrical outlet, these regulate electricity flowing to the outlet based on outdoor temperatures. Audits show a 46% savings on the energy costs associated with plugging in cars on campus during winter.

Energy and Water Retrofits

Education Building

The Education Building has been used as a testing ground for a number of sustainability pilot projects including:

- · Replacing toilets with dual-flush, low-flow toilets and retro-fitting urinals with a sensor system
- Installing variable frequency drives (VFDs) to control the heating, ventilation, and air conditioning motor system
- Operating as a living lab for several student projects



Prairie Habitat Garden Education Building

The College of Education's Prairie Habitat Garden is designed to showcase native prairie plants and demonstrate the value of natural spaces for learning and development. The garden also aims to increase the understanding of Saskatchewan's cultural heritage through the incorporation of Indigenous people's perspectives in the design elements of the garden. The space is intended to be an interactive learning and play space.

Meewasin Valley Authority

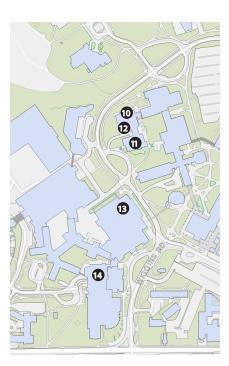
Meewasin Valley

The Meewasin River Valley in Saskatoon is managed by its three primary landowners: the Province of Saskatchewan, the City of Saskatoon, and the University of Saskatchewan. Formed in 1979, the Meewasin Valley Authority (MVA) is a collective management group that manages conservation and sustainability efforts in the river valley while maintaining development control over its lands. The MVA carries out important projects such as riverbank stabilization efforts while running education initiatives on the importance of maintaining the river valley's natural environment and cultural roles.



Law Addition Law Building

The Law addition, officially titled the Law Foundation of Saskatchewan Wing, was completed in 2007. This building represents a new direction in building design at the University of Saskatchewan. Compared to a similar-sized conventional building, water use in the new law expansion is 47% lower and overall energy use is 57% lower. Over 32% recycled materials were used in the construction and furnishings, and 91% of construction waste was recycled. The Law addition is certified LEED Gold.





Law Living Roof Law Building

Living Roofs date back thousands of years. The soil medium soaks up rainwater like a sponge, reducing problems from excess storm water runoff. They reduce urban heat islands by reducing roof top temperatures, and protect the roof itself from extreme temperatures. Vegetation lowers the temperature of our urban environments, which helps to reduce ground-level ozone, or smog. Like other plants, the green vegetation also consumes carbon and gives back oxygen.



Native Law Centre Law Building

The Native Law Centre at the University of Saskatchewan was founded in 1975 by Dr. Roger C. Carter, whose commitment to Aboriginal and social justice issues convinced the University of the need for a Centre to facilitate access to legal education for Aboriginal peoples, to promote the development of the law and the legal system in Canada in ways which better accommodate the advancement of Aboriginal peoples and communities, and to disseminate information concerning Aboriginal peoples and the law.



Health Science D-Wing & E-Wina



Health Science Building

All three main wings of the Health Science Building were constructed with sustainability in mind, but the new D- and E-wings are most impressive. The guiding principles behind the construction of the new additions were an emphasis on interdisciplinary teaching, increased attention to Aboriginal health conditions and needs, and a greater attention to collaborative research. Health Science D-Wing is certified LEED Silver, and E-Wing is certified LEED Gold.





SENSSA Community Garden

St. Andrews College

With St. Andrew's generous contribution of space, the School of Environment and Sustainability Student's Association (SENSSA) are now using this community garden. Community garden members share the responsibilities of planting, tending, and harvesting.



Bike Repair KitPhysical Activity Complex (PAC)

With a valid student card, bike tool kits and supplies can be rented from the Physical Activity Complex Equipment Room during PAC hours.

University Club Herb Spiral

University Club

A joint effort by the University Club, the Permaculture Research Institute of Saskatchewan, the Office of Sustainability and the Grounds Department, this small herb garden uses a spiral design to maximize the use of small garden spaces while providing a range of growing conditions. Herbs are placed to take advantage of the downhill flow and drainage of water. Sun-loving herbs are planted on the south side and more shade tolerant species on the north.



Louis' Campus PubMemorial Union Building

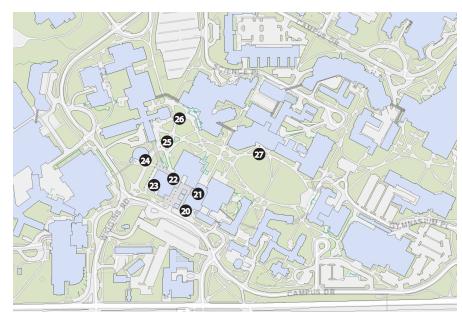
Louis' has been taking specific steps to increase the sustain-

steps to increase the sustainability of its operations over many years, including:

- Using recycled/compostable take-out containers
- Exclusively serving or certified Fair Trade/Organic and locally roasted coffee,
- Exclusively serving local, Saskatchewan-brewed beer on all 20 draught taps,
- Purchasing produce from the College of Agriculture Rooftop Garden,
- Replacing all lighting with LEDs,
- Eliminating straws from their bar service, with compostable straws available upon request



The convenient U-Pass system offers students huge savings for public transit, making it accessible and easy to use. By simply tapping your student pass on the bus as often as you need, you can get practically anywhere in the city! Another transportation option is UCommute, an easy carpool and ride-share matching service directly integrated into PAWS that helps you reduce your transportation footprint and make new friends! The U-Pass program is managed by the USSU, and UCommute is managed by the Office of Sustainability.



Place Riel Student Centre

Place Riel

The University of Saskatchewan Students' Union (USSU) places sustainability at the core of its practices, events, campaigns, operations, and services. For the Place Riel Renovation and Expansion Project, U of S students tasked the design team with making the project as environmentally sustainable as possible. Place Riel is certified LEED Silver.

USSU Sustainability Committee

Place Riel

As of September 2016, the Office of Sustainability has partnered with the USSU Sustainability Committee to provide sustainability grants to U of S Students. The committee's funding capabilities and enhanced student leadership make it the perfect way to help U of S students fund their sustainability-related projects, initiatives, or events.

Murray Library Murray Building

During the renovation of the Murray Building, many sustainable practices took place. Existing concretes were hardened and polished, eliminating the need for new floor materials or finishes. Lighting costs were reduced with the use of daylight sensors and a dimmer. But most impressive of all, 75% of construction waste was diverted from the landfill. Murray Building is certified LEED Silver.

Art*Cycled Murray Building

ART*Cycled is a reclaimed and upcycled art installation that premiered for the first time in October, 2016 during Campus Sustainability Week. Through a partnership with the Office of Sustainability, U of S art students were able to save university-owned surplus assets from the landfill by turning them into thoughtful pieces of sustainable art.

Gordon Oakes Red Bear Student Centre

Gordon Oakes Building

As an intercultural gathering place, the Gordon Oakes Red Bear Student Centre brings together the teachings, traditions and cultures of the peoples of Saskatchewan. Grounded in the teachings of collaboration, cooperation, humility, reciprocity and sharing, the centre aims to enhance First Nations, Métis and Inuit student success.

Arts Tower Edible Garden

Arts Building

In 2017, following the success of the Agriculture Centennial Edible Garden, the U of S planted another garden next to the Arts Tower. This garden includes native Saskatchewan plants, as well as some bred at the U of S, including Carmine Jewel Cherry and Borealis Honeyberry.

Bike Repair Stand Arts Building

The USSU along with the Office of Sustainability has installed a bike repair stand outside of the Arts Tower. This repair stand is equipped with a manual air pump and an assortment of tools for students to use for free.

Big Belly Solar Compactor Geology Building

The Big Belly Solar Compactor uses solar power to compact the trash and beverage containers collected in its two bins so it can hold five times more than a non-compacting bin. This reduces fuel, labour, and maintenance costs associated with collection.







Marquis Hall

Marguis Hall

Dining Services and Marquis Hall are always improving the sustainability of their operations. Initiatives to date include:

- Removal of food trays
- · Replacement of large water-cooled refrigerators
- Only 100% cage-free eggs
- · Biodegradable take-out containers
- · Local ingredients whenever possible
- · Fair trade coffee
- · Discounts for using a re-usable mug
- · Cereal and granola bars made from 75% locally-sourced lentils

The new food waste dehydrator, the first of its kind in Canada, is what really sets Marquis Hall apart. Instead of composting directly, the machine crushes everything into a semi-compost material. The dehydrator helps mitigate roughly 2,487 lbs of food waste weekly.



Sustainable Grounds Management

The Bowl

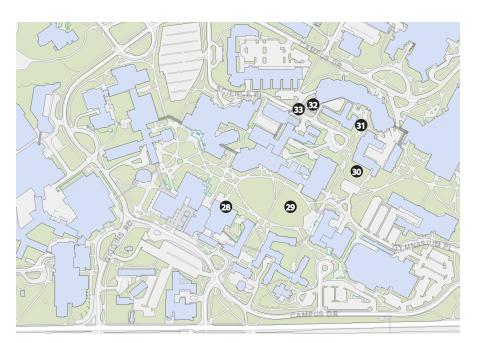
How we design, maintain and use our outdoor spaces has sustainability implications. The U of S Grounds Department strives to maintain and develop the campus landscape using the most sustainable practices possible, using principles such as Integrated Pest Management, collecting rainwater for irrigation, xeriscaping, and fertilizing with compost.



John Mitchell Solar Panels

John Mitchell Building

In 2017 a solar panel installation was erected on the south end of the John Mitchell Building. These panels are the result of a Living Lab student project which sought to expand renewable energy generation on campus to increase the availability of experiential learning opportunities. The panels are overseen by student volunteers from the U of S Innovative Energy Team and they are used as hands-on study aids for the College of Engineering.





Agriculture Centennial Edible Garden

Agriculture Building

In 2012, the College of AgBio marked its 100th anniversary by planting a garden of domestic fruit crops to demonstrate the potential for landscaping with fruit trees to support sustainable local food production and food security. The plants include sour cherries, haskaps, apples, and even grapes!



Agriculture Rooftop Garden

Agriculture Building

The container garden, which is growing food on a concrete surface, provides a demonstration of urban agriculture methods and hands-on learning

for students. All the vegetables grown in the garden are delivered to Culinary Services on campus who serves them to staff and students at the Marquis Culinary Centre.



Bike Lockers

Science Place

The university has 19 bike lockers conveniently located throughout campus. The lockers are made from 100% recycled black plastic and come with a locking mechanism and padlock. The cost of the bike lockers starts at \$20/month and is arranged through Parking & Transportation Services.





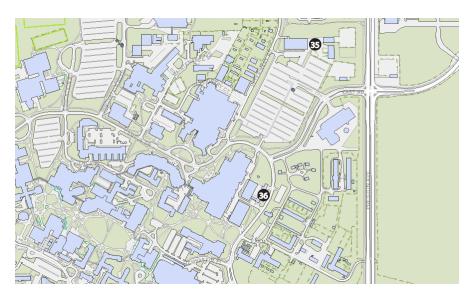




Collaborative Science
Research Building
Collaborative Science Research

Collaborative Science Research Building

Completed in 2018, the new Collaborative Science Research Building (CSRB) will focus on projects that have potential clean-technology applications, such as the development of more efficient bio-based energy systems and better water purification techniques, the breeding of more drought-tolerant crops, and the development of more sustainable pest-control mechanisms. The building itself did not qualify for LEED certification because of the presence of rooftop greenhouses, so the U of S is working with Green Globes to use the CSRB to develop the criteria for certification of buildings with greenhouses.



Campus Recycling Program

Recycling Centre

The Recycling Centre is the hub of the Campus Recycling Program and plays an essential role in the university's goal to divert 90% of campus waste from the landfill. The program accepts all clean single-stream recycling materials, beverage containers, empty toner and ink cartridges, as well as batteries and cell phones.

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Re-Use It Bin Campus Drive

Located in a large green Loraas bin, reusable construction material is available here for free. The bin often contains drywall, wood, ceiling tiles, and good quality used furniture. Materials are available to everyone on a first-come, first-served basis. This measure is helping the university meet its goal of reducing construction waste by 50%.



University of Saskatchewan **Campus Sustainability Tour**



Horticulture Club Garden Project

Horticulture Club

The U of S Horticulture Club is open to all students on campus. The Club maintains a vegetable garden each year which requires members to start transplants in the greenhouse, perform field seeding, weed the plot, and then harvest and store the produce. In high yield seasons the club has donated excess produce to local charities in addition to supplying Marquis Hall on campus with fresh produce.



Horticulture Solar Panels

Horticulture Science Field Facility

The installation of a 24-kilowatt solar panel system at the Horticulture Science Field Facility is one step in reducing the university's greenhouse gas emissions. The solar panels provide nearly 70% of the horticulture facility's yearly power.



McEown Place Community Garden

McEown Place

The McEown Place residences house students and their families year-round. Through the community garden, the residents have been given the opportunity to grow their own food and build relationships with their neighbours. The garden has a summer coordinator every year who works out of the Office of Sustainability.



Aspen & Spruce Hall Solar Panels

College Quarter

Solar thermal panels have been installed at the Aspen Hall and Spruce Hall residences in College Quarter. The panels contribute 25% of the energy required to produce hot water in the halls. Due to the success of these solar thermal panels, additional panels will be considered for other university residence buildings.

Customizing the Sustainability Tour

There are many sustainable aspects of campus, and touring them all at once may be overwhelming. To help you create a sustainability tour that best meets your needs and interests, consider the following broad categories, and the locations included in each one.



Infrastructure & the Built Environment



Green Buildings



University Services



Gardens & Plants



Sustainability Feature

Infrastructure & the Built Environment	5. North Road Paving Project 6. Plugging in Efficiently 7. Energy & Water Retrofits 11. Law Living Roof 26. Bike Repair Stand	27. Big Belly Solar Compactor 30. John Mitchell Solar Panels 32. Agriculture Rooftop Garden 38. Horticulture Solar Panels 40. Aspen & Spruce Hall Solar Panels
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University of Saskatchewan

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