

**Thompson Rivers University
Campus Sustainability Action
Plan:**

**Ecological Footprint Analysis
and Steps Forward**

2010 - 2012

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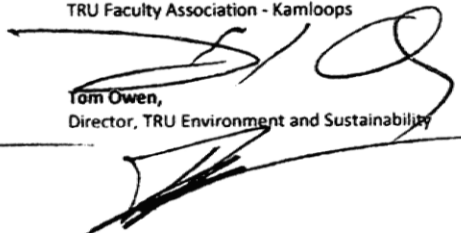
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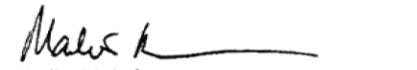
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PLANNING AND MONITORING FOR SUSTAINABILITY AT THOMPSON RIVERS UNIVERSITY

Environmental sustainability is one of Thompson Rivers University's (TRU's) eight core values. We strive to be the University of Choice for research, learning and action to bring about a sustainable future. Our 2007 - 2012 strategic plan¹ outlines four key sustainability objectives:

- ~Develop and expand programming and associated research activities in the areas of environmentally sustainable technologies, policy development, and environmentally and socially responsible economic development.
- ~Develop policies and best practices that support environmental stewardship and sustainability in the university's operations.
- ~Foster environmental literacy amongst students, staff, faculty and alumni, and cooperate with other community partners to increase environmental awareness.
- ~Encourage the development of partnerships with public and private sector organizations in support of environmental stewardship and sustainability.

The challenges of sustainability are complex. To deal with this complexity, TRU is committed to a strategic approach that utilizes the skills of our diverse and talented faculty, students, administrators and staff. This strategic approach involves measuring our environmental impacts, setting goals, implementing plans and monitoring our progress.

This report is the first TRU Campus Sustainability Action Plan. It identifies our current impacts and lays out specific actions for 2010 - 2012. This plan was developed through a roundtable process involving representatives from all of the trade unions and professional associations on campus.

PARTICIPANTS

Sustainability involves everyone in the campus community. Therefore, the Director of Environment and Sustainability invited all of the campus-wide labour, student professional and alumni associations to participate in the process of developing the Campus Sustainability Action Plan. Each organization nominated one representative with the exception of the TRU Faculty Union, which nominated a second representative from the Williams Lake Campus to reflect the unique needs of that campus. The TRU Environmental Advisory Committee has reviewed and recommended implementation of the Campus Sustainability Action Plan.

FORMAT OF THIS PLAN

This Sustainability Action Plan reports the results of TRU's current environmental impacts based on an ecological footprint assessment. Three broad categories of action have been identified, focusing on the natural, built and human environments at TRU. Specific goals, actions and tasks are described in more detail in the three-year plan below. The Department of Environment and Sustainability will coordinate implementation of the plan with the support of the Environmental Advisory Committee and the greater TRU community.

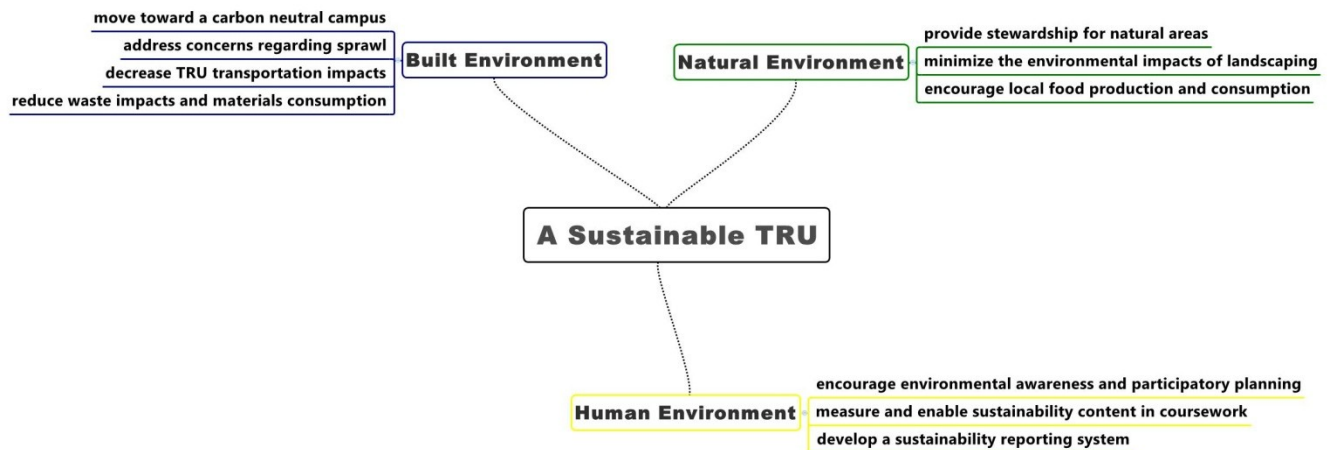


Figure 1. Summary of the ten goals across the three categories of the TRU Sustainability Action Plan.

GLOSSARY

Biodiversity conservation and restoration; efforts aimed at protecting the richness and diversity of organisms on Earth

Carbon offsetting; projects or activities that reduce the amount of green house gasses being emitted into the atmosphere

Ecological footprint; the total area of the Earth's biological productivity that is expropriated by an organization or individual

Environmental advisory committee; The TRU body that guides sustainability policies and actions on campus

Fugitive emissions sources; non-standard sources of green house gas emissions such as welding and refrigerant gasses that typically make up a small proportion of an organizations total emissions

Global ha (hectares); the basic unit of ecological footprint assessment, it represents a hectare of earth's land assuming that all land types (e.g. forest vs. agricultural) are equally productive

Landscape committee; the TRU committee that guides landscaping policies and actions on campus

LEED building standards; Leadership in Energy and Environmental Design, a rating system that ensures high levels of energy conservation and environmental performance in construction and renovation projects

Offset fees; fees paid to the BC government to encourage the reduction of public sector green house gas emissions

Terms of reference; a document produced to guide policy and action

Transportation demand management; strategies that reduce the negative impacts of transportation

Waste audit; the estimation of the total amounts and sources of waste produced by an organization

TRU ECOLOGICAL FOOTPRINT ASSESSMENT

To understand the relative environmental impacts of the TRU Kamloops Campus, an ecological footprint analysis was carried out for the 2008/2009 school year. Ecological footprint analysis was developed by Bill Reese and Mathis Wackernagel at the University of British Columbia². Ecological footprints calculate the area of biologically productive land required to support the activities of an organization, country or individual. Footprints are commonly used to illustrate equity in resource use between nations (as shown below). They can also be used to assess the relative impact of an organization's activities.

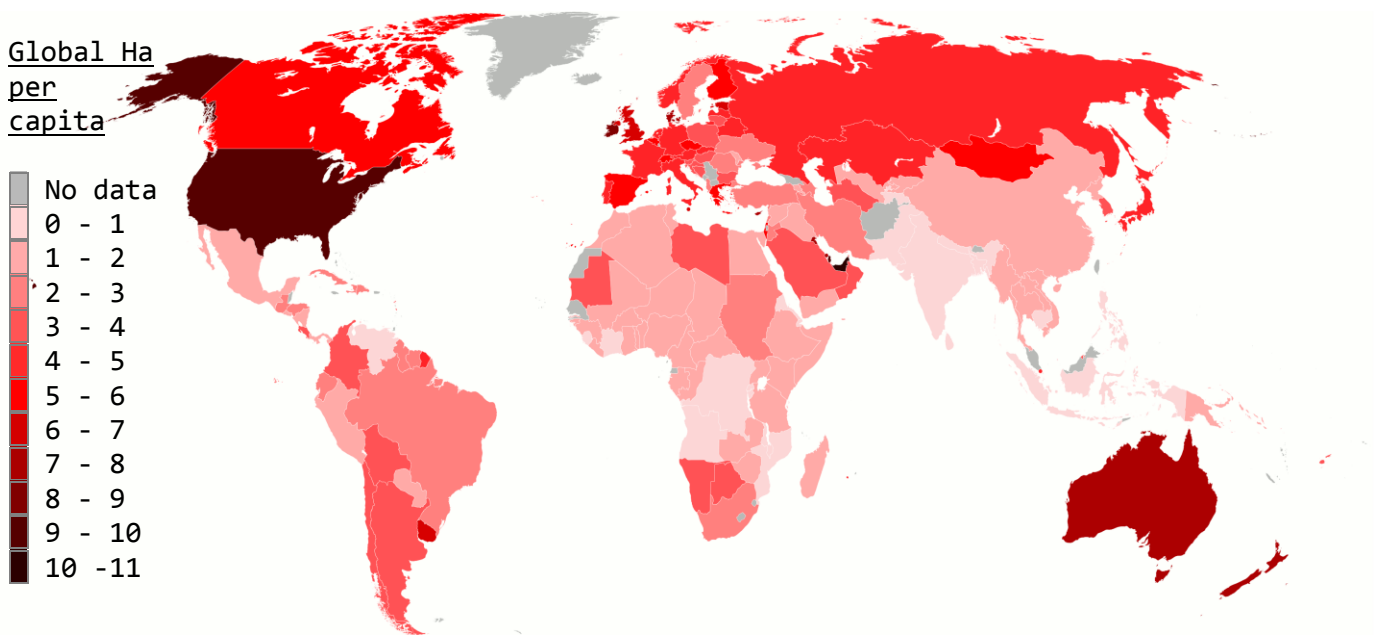


Figure 2. Ecological footprints per person for each country for 2006[#]. The unit for ecological footprint analysis, global hectares, is a measure of expropriated carrying capacity of the Earth's ecosystems. Values are normalized for different land types (e.g. forest vs. agricultural land have different biological productivities). It is estimated using these values that it would require 1.3 Earths to sustain the current human population at current consumption levels³.

The calculated ecological footprint for TRU's Kamloops Campus for 2008/2009 was approximately 30 kilometres squared - or 36 times the size of the campus. This estimate represents the amount of the Earth's land required to support the campus's activities for one year. Because tracking all of TRU's resource consumption would be nearly impossible, the ecological footprint underestimates our actual environmental impact. Nevertheless, the ecological footprint assessment allows us to compare our various environmental impacts. The assessment encompasses food eaten, office paper consumed, water used, waste generated and the effects of paving over ecosystems for our buildings and roads. It also tracks the impacts from energy and natural gas usage and commuting and air travel, including the land required to sequester greenhouse gases. The diagram on the next page shows the results of the TRU 2008/2009 ecological footprint analysis.

Ecological Footprint

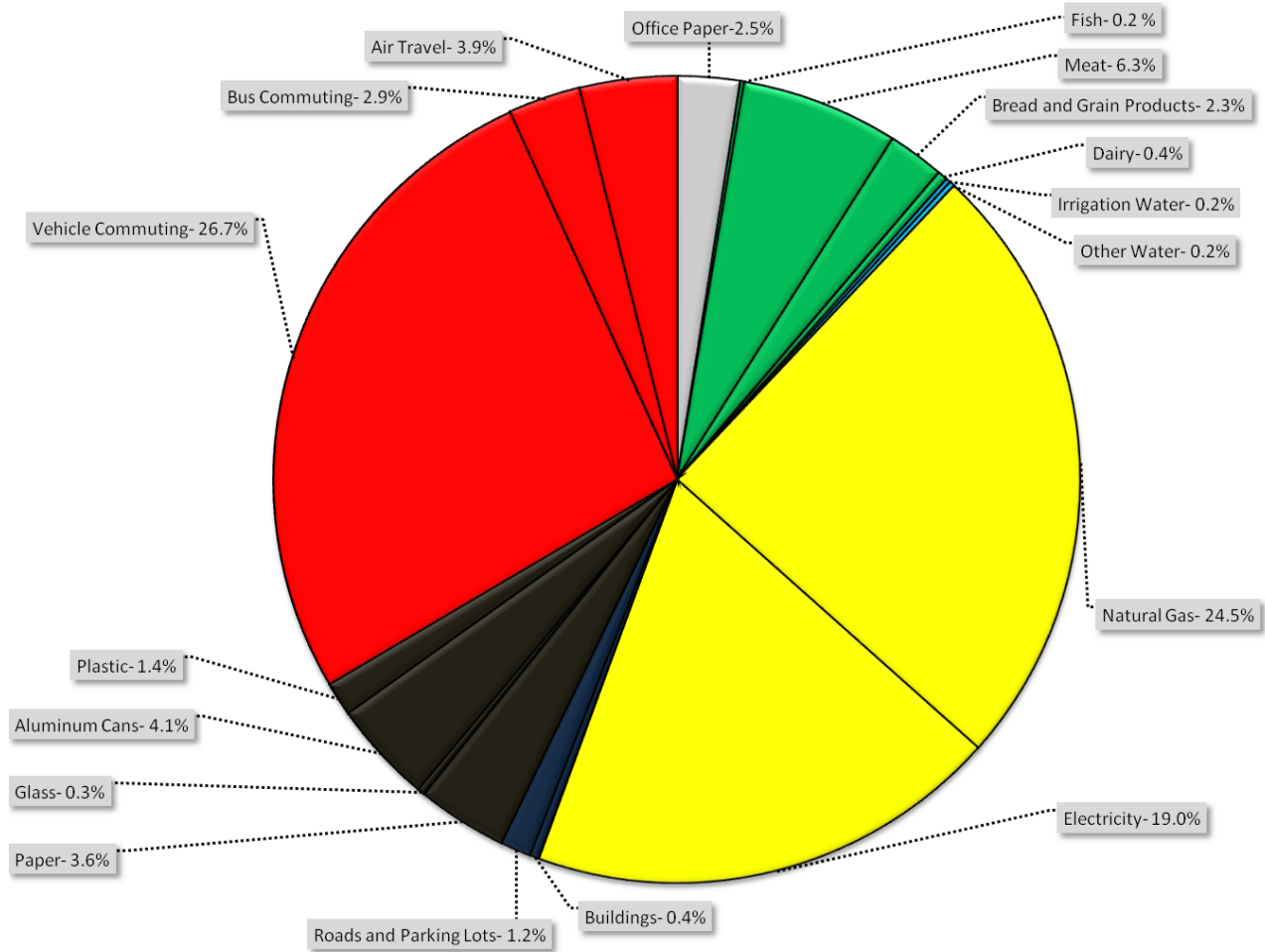


Figure 3. TRU's Ecological footprint for 2008/2009 was 2985 hectares, or 29.85 km². Office paper is grey, food is green, water usage is light blue, energy consumption is yellow, paved areas are dark blue, land filled waste is brown and transportation is red.

GOAL: provide stewardship for on-campus and local natural areas

CONTEXT AND SCOPE:

One of the chief characteristics of TRU's Kamloops Campus is that it is surrounded by beautiful natural areas. To the west lies the grassland, sagebrush and ponderosa pine forest of Kenna Cartwright Park, the largest municipal park in British Columbia⁴. To the east, Guerin Creek runs steeply downhill to meet the Thompson River. Over half the campus consists of natural grasslands. Grasslands like these comprise less than one percent of British Columbia's land base but hold over thirty percent of the province's endangered species⁵. TRU also has a research station on the outskirts of Wells Gray Provincial Park and an Animal Health Research Farm on the outskirts of Kamloops. Over the next three years, we intend to put specific measure in place to conserve and manage our natural areas for biodiversity conservation, research and teaching values.

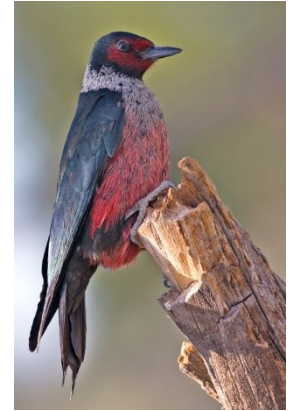


Figure 4. The TRU Campus provides considerable habitat for wildlife, like the endangered Lewis's Woodpecker shown here **.

STEPS FORWARD:

ACTION: clean up Guerin Creek and increase its value as a teaching site for TRU students and the general public

- ⇒ **TASK:** organize clean up of Guerin Creek
- ⇒ **TASK:** identify and agree on biodiversity conservation, research and teaching values
- ⇒ **TASK:** agree on a joint conservation plan with the City of Kamloops and the Kamloops West Rotary Club
- ⇒ **TASK:** implement Guerin Creek plan and monitor its efficacy

ACTION: set aside the western, undeveloped portion of TRU Kamloops campus as a *Biodiversity Conservation and Teaching Area*

- ⇒ **TASK:** identify participants in the management of this area
- ⇒ **TASK:** set specific objectives for the *Conservation and Teaching Area*
- ⇒ **TASK:** outline boundaries and appropriate uses of this area in official policy
- ⇒ **TASK:** identify specific biodiversity values in this area and make recommendations for conservation and restoration
- ⇒ **TASK:** implement specific conservation and restoration measures

ACTION: identify other on-campus and off-campus natural areas and biodiversity values under TRU's control

- ⇒ **TASK:** map natural areas on the Kamloops and Williams Lake campuses, Wells Grey Research Centre and the Animal Health Research Farm
- ⇒ **TASK:** identify specific biodiversity values in these areas and make recommendations for conservation and restoration

GOAL: minimize the environmental impacts of TRU's landscaping while maintaining current aesthetic values

CONTEXT AND SCOPE:

TRU's Kamloops Campus has considerable lawn and garden areas that contribute to the atmosphere and dynamic of the university. Because we are set in the semi-arid climate of the Thompson River Valley, traditional lawns and landscaping require considerable water use. Water for landscape irrigation accounts for nearly half of our total water usage. Occasional pesticide use has also occurred on the grounds. Rethinking and redesigning our landscape to reduce environmental impacts is a priority over the next three years. Because the grounds serve as a classroom for students in our horticultural program, re-evaluating landscape practices gives graduates an edge in sustainable landscape practices.



Figure 5. The lawns and gardens of the TRU campus provide important spaces for community gatherings and reflective solitude. Extending the efficiency of our irrigation systems, for example, will help to reduce the associated environmental impacts.

STEPS FORWARD:

ACTION: update the current *TRU Landscape Planting and Rehabilitation Plan* to include reductions in pesticide and water use

- ⇒ **TASK:** discuss and gain input from the horticulture committee regarding the plan update
- ⇒ **TASK:** develop a *Terms of Reference* for the plan update
- ⇒ **TASK:** identify and secure funding for the plan update
- ⇒ **TASK:** select a contractor to develop the plan update, including integrated pest management strategies and water reduction measures
- ⇒ **TASK:** review the plan update and make recommendations
- ⇒ **TASK:** identify and secure funding for implementation of pesticide and water reduction measures
- ⇒ **TASK:** implement pesticide and water reduction measures
- ⇒ **TASK:** identify specific biodiversity values in these areas and make recommendations for conservation and restoration
- ⇒ **TASK:** identify and secure funding for biodiversity conservation and restoration

GOAL: encourage more local food production and consumption

CONTEXT AND SCOPE:

Food production and transport accounts for approximately 19% of total green house gas emission for Canadian households⁶. Food accounted for nearly 10% of our ecological footprint in 2008/2009. But, many of the emissions and impacts associated with food are difficult to account for due to the complexity of our global food system. Irrespective of our ability to measure all of our food impacts eating local foods connects us with our local ecosystems and communities.

TRU is fortunate to be located near some of British Columbia's prime agricultural areas. Within 250 km are the fruit and vegetable growing centres of the Fraser and Okanagan Valleys, the cattle ranching of our own Thompson Valley and the seafood of the Pacific Coast. As a large institutional food purchaser, we have the ability to significantly support local farmers. There is also an opportunity to integrate sustainable food sourcing into TRU's culinary arts program and retail meats program.

STEPS FORWARD:

ACTION: establish a community garden for the use of TRU community members

- ⇒ **TASK:** design and build community garden
- ⇒ **TASK:** allocate garden plots according to community needs
- ⇒ **TASK:** establish a set of educational resources for novice vegetable gardeners

ACTION: increase the availability of local food on campus and support local farmers

- ⇒ **TASK:** utilize more locally produced, range-fed meat in the retail meat program
- ⇒ **TASK:** increase the use and visibility of local agricultural products by campus retailers
- ⇒ **TASK:** develop purchasing guidelines for campus food sellers



Figure 6. During Fall 2009, TRU's first ever sustainable seafood feast, a resounding success, was jointly hosted by Culinary Arts and Fisheries Management students.

GOAL: become a carbon neutral campus

CONTEXT AND SCOPE:

Under the provincial *Green House Gas Reduction Targets Act* (GGRTA), as of 2010, British Columbia's universities are required to report and pay offset fees for their greenhouse gas emissions⁷. Fees will be paid to the Pacific Carbon Trust, a new Crown corporation, which will fund carbon offsetting projects in BC. Due to the complexity of assessing emissions associated with large institutions, only greenhouse gas emissions from office paper, fleet vehicles, natural gas, electricity and fugitive sources are currently reportable. Meeting these legal requirements is an important first step in climate neutrality, but TRU aims to monitor and manage our other sources of emissions as well.

STEPS FORWARD:

ACTION: meet reporting and offset fee requirements under the *Green House Gas Reductions Target Act*

- ⇒ **TASK:** identify and gather basic information to meet provincial reporting requirements
- ⇒ **TASK:** implement a system to seamlessly gather required greenhouse gas measurements and reporting information
- ⇒ **TASK:** pay offset fees to *Pacific Carbon Trust*

ACTION: investigate the ability of TRU to research and develop carbon offsetting projects under the developing BC offsets market

- ⇒ **TASK:** review funding criteria through the Pacific Carbon Trust and other sources
- ⇒ **TASK:** identify potential participants and resources in carbon offset projects
- ⇒ **TASK:** develop proposals and bids for carbon offset projects
- ⇒ **TASK:** implement successful proposals and bids

ACTION: measure out-of-scope emissions and strive for in-scope and out-of-scope greenhouse gas reductions

- ⇒ **TASK:** audit TRU material and energy consumption and determine major out-of-scope emissions
- ⇒ **TASK:** hire an energy manager to determine capital expenditures that balance cost-effectiveness, energy and greenhouse gas reductions
- ⇒ **TASK:** inventory fleet vehicles and form a plan to replace end-of-life fleet vehicles with low-emissions vehicles
- ⇒ **TASK:** form a plan to reduce on-campus vehicle emissions

GOAL: address concerns regarding sprawl previously raised in the *2003 Campus Master Plan*

CONTEXT AND SCOPE:

The 6 Buildings built on the TRU campus since 2000 have all had energy savings and green components. TRU has the ability to demonstrate leadership in institutional planning and construction by implementing cutting-edge technologies for future infrastructure changes. TRU has grown substantially in the last several years with enrolment growing by 30% since 2000. The *2003 Campus Master Plan*⁸ predicted this growth and emphasized the need to keep the campus dense, liveable and pedestrian friendly while maintaining the park like setting and scenic vistas.



Figure 7. The TRU house of learning will be built to rigorous LEED environmental building standards.

STEPS FORWARD:

ACTION: identify needs and make recommendations regarding current building usage with a goal to increase occupant density and satisfaction

- ⇒ **TASK:** identify existing information on current building usage and occupant density at Kamloops and Williams Lake campuses
- ⇒ **TASK:** recommend improvements to current building usage and future developments that maintain and increase the density and liveability of the campus

ACTION: review current TRU "green buildings" to develop best practices for future development

- ⇒ **TASK:** conduct a formal review of the energy, materials and design performance of current TRU green buildings
- ⇒ **TASK:** develop best practices for future development

ACTION: renovate a portion of the Old Main building to serve as a living laboratory for green energy and renovation technology

- ⇒ **TASK:** form a *terms of reference* for renovation
- ⇒ **TASK:** secure funding for renovation
- ⇒ **TASK:** hire architect and developer
- ⇒ **TASK:** review plans
- ⇒ **TASK:** carry out renovation

GOAL: decrease TRU transportation impacts and increase the overall satisfaction of TRU community members regarding transportation choices

CONTEXT AND SCOPE:

Transportation impacts comprise the largest single category of TRU's ecological footprint. Travel for business and research and on-campus service vehicles are included in this category, but commuting is by far the largest single impact. To reduce greenhouse gas emissions from commuting, we need to make it easier for people to get to TRU using alternative modes of transportation. As well, in 2008/2009 42% of our students were enrolled in distance and online coursework through the TRU Open Learning division. Encouraging and promoting online coursework will decrease the need for students to commute to campus and reduce our overall footprint.

Over the next three years, TRU will conduct a thorough study of how and why people choose to commute to campus. We will seek opportunities to work both on campus and with partners in the public sector to make cycling, walking and transit more attractive options. This study began in fall of 2009 with a survey of current transportation choices. The results of this survey indicate that three quarters of all commuting trips to TRU are by personal vehicle, and the average commute is 5.6 km. Of those individuals that traveled by personal vehicle (at least occasionally), 71% had only one person, including the driver, in the vehicle. As well, 24% of vehicles had two occupants and 5% three or more occupants.

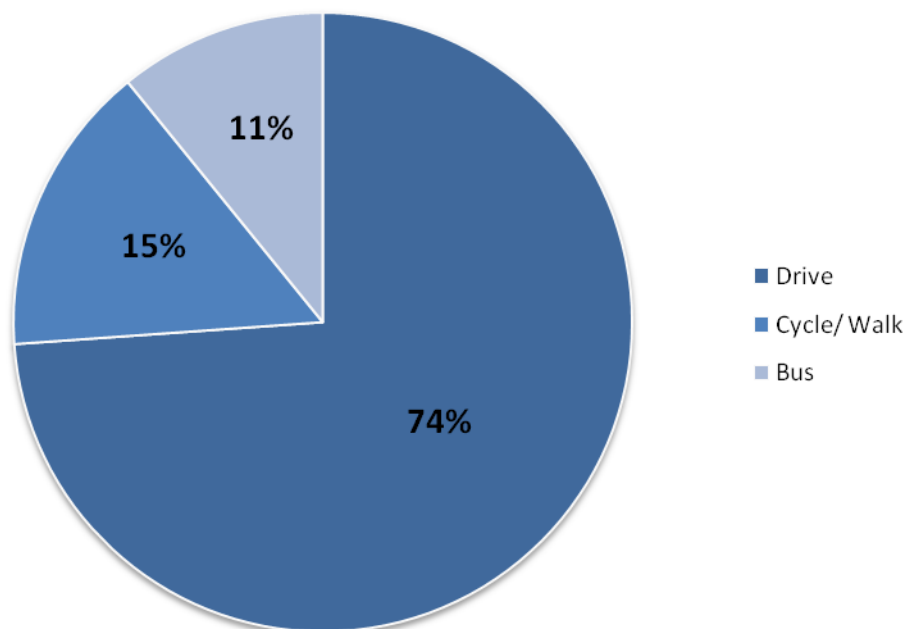


Figure 8. Results of the TRU transportation survey showing all trips to TRU during a given week.

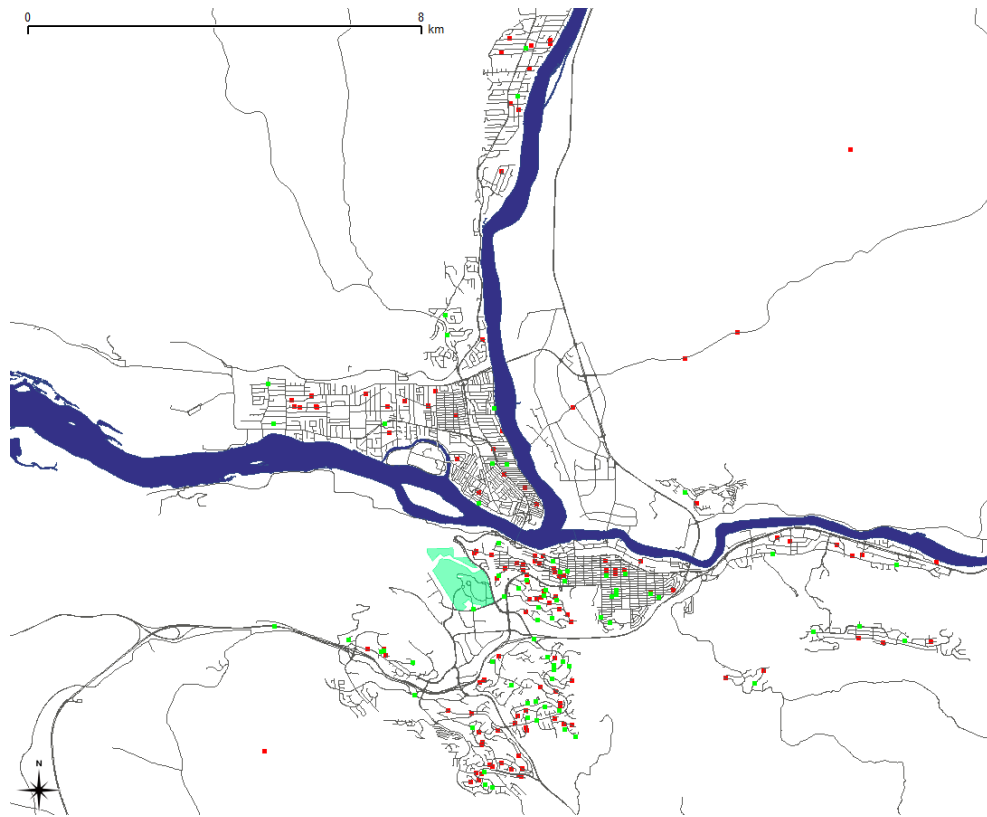


Figure 9. Approximate location of respondents to the TRU transportation survey. The campus is shown as the green shape in the middle. Individuals who drive more than 50% of the time are in red, and individuals who drive 50% of the time or less are in green⁺.

STEPS FORWARD:

ACTION: improve carpooling programs

- ⇒ **TASK:** identify needs for a TRU carpooling program
- ⇒ **TASK:** implement improvements to the current carpooling program
- ⇒ **TASK:** monitor the satisfaction and success of with the TRU carpooling program

ACTION: implement a transportation demand management system

- ⇒ **TASK:** conduct a transportation demand study
- ⇒ **TASK:** identify and secure funding for new transportation measures
- ⇒ **TASK:** work with other stakeholders (BC Transit, City of Kamloops, etc) to implement recommendations of the transportation demand management study
- ⇒ **TASK:** monitor and review the effectiveness of and satisfaction regarding transportation demand management measures

GOAL: reduce waste impacts and materials consumption

CONTEXT AND SCOPE:

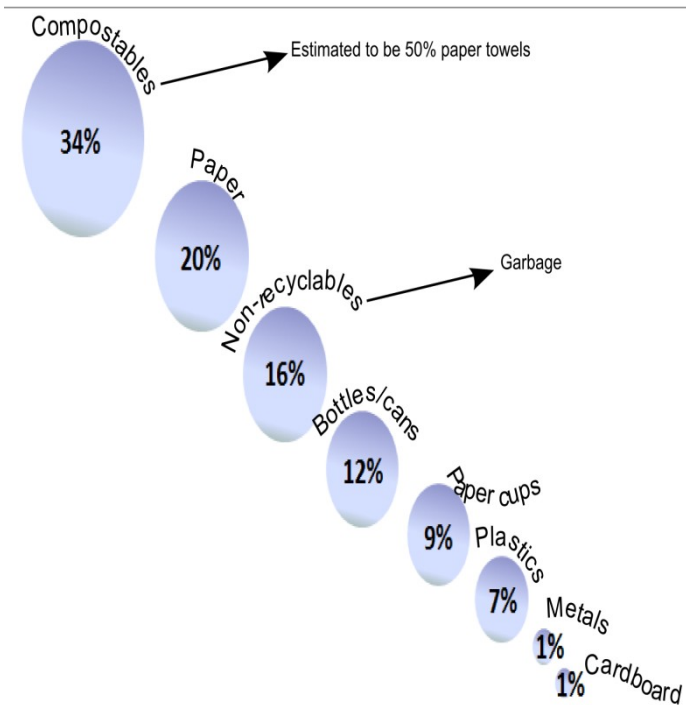


Figure 10. Results of the TRU waste audit identifying material going to the landfill for a single day. Note that percentages are by weight and only 16% of audited material cannot be recycled or composted.

Waste not only takes up valuable landfill space, it is also associated with excess extraction of resources. For example, recycling a single aluminum can saves the equivalent of 1.9 litres of gasoline⁹. Although Canadians continue to recycle more, we also landfill more. Between 2002 and 2006, per capita landfill waste increased by 8.2%¹⁰.

In the spring of 2009, students and staff completed TRU's first ever waste audit. The image at left shows the results of this audit. Although recycling stations are available throughout the campus, only 16% of the material collected from garbage bins cannot be recycled or composted in Kamloops. Over the next four years, TRU will continue to work both internally and with external partners to promote more on-campus recycling and composting.

STEPS FORWARD:

ACTION: divert the majority of compostables and recyclables from the landfill

- ⇒ **TASK:** conduct a periodic waste audit
- ⇒ **TASK:** assess and reduce major sources of packaging and waste including e-waste and toxic waste
- ⇒ **TASK:** investigate and implement new composting and recycling programs
- ⇒ **TASK:** monitor and report on the efficacy and cost-savings of waste reductions

ACTION: reduce paper usage per student by 50% by 2012

- ⇒ **TASK:** measure paper usage on an annual basis
- ⇒ **TASK:** determine specific actions to reduce paper and estimate savings from each activity
- ⇒ **TASK:** review paper savings and investigate options for further reductions

GOAL: encourage environmental awareness and participatory planning among TRU community members

CONTEXT AND SCOPE:

Fostering a commitment to sustainability throughout the TRU community requires numerous actions from students, faculty, staff and administration. Simple personal actions, such as choosing to turn off a light switch or computer when leaving a room, are a necessary part of improving our environmental performance.

As well, TRU is fortunate to have people that are highly knowledgeable and passionate about myriad environmental issues. A drastic and continual improvement in TRU's environmental performance will require a forum for concerned students, faculty and staff to voice their opinions and share their solutions. Fostering this participatory process and supporting innovative approaches to create a more sustainable TRU is the key to success.

STEPS FORWARD:

ACTION: form voluntary teams and committees to inform and guide specific sustainability activities

- ⇒ **TASK:** form "Green Teams" for each major building on campus and form sub-committees of the current environmental advisory committee as needed
- ⇒ **TASK:** have green teams conduct an environmental needs assessment and form plans for each building
- ⇒ **TASK:** review individual needs assessments and form a campus-wide green infrastructure and communications plan
- ⇒ **TASK:** implement Green Team infrastructure and communications plans
- ⇒ **TASK:** review and update plans as needed
- ⇒ **TASK:** identify and secure funding and release time for Green Teams and support committees as needed

ACTION: initiate on-campus information campaigns linking simple personal actions and concrete environmental results

- ⇒ **TASK:** delineate and communicate activities that encourage simple personal actions (such as turning off computers, or double-sided printing)

ACTION: increase the visibility of the TRU sustainability office on campus and encourage student and staff participation in sustainability programs

- ⇒ **TASK:** include TRU sustainability initiatives as a component of orientation week
- ⇒ **TASK:** develop the TRU sustainability website as a reporting and educational tool
- ⇒ **TASK:** plan and participate in other on-campus and community wide sustainability events

GOAL: develop methods for measuring and enabling sustainability content in academic coursework

CONTEXT AND SCOPE:

Reducing TRU's ecological footprint is important, but as an academic institution, we can contribute significantly to a more sustainable world through teaching and research. As a regional university, TRU has both academic degrees and technical and professional programs. By emphasizing sustainability across all faculties, we hope to produce graduates with cutting edge skills and abilities, and the wherewithal to solve complex sustainability issues. Currently, for example, the School of Trades and Technology is developing renewable energy technician programs while students in the Masters of Environmental Science are engaged in diverse research, ranging from eco-tourism to ecological economics to badger conservation. In 2009, a new environmental economics and sustainable development minor was adopted at the undergraduate level.

STEPS FORWARD:

ACTION: develop methods for measuring and enabling sustainability content in academic coursework

- ⇒ **TASK:** review current academic programs and coursework for sustainability content
- ⇒ **TASK:** hold roundtables and workshops with faculty and students on needs and performance in sustainability curricula and teaching methods
- ⇒ **TASK:** include sustainability considerations as a component of the academic master plan
- ⇒ **TASK:** implement specific activities to enable sustainability curricula
- ⇒ **TASK:** monitor performance in integrating sustainability into academic coursework

ACTION: create a certificate in sustainability for undergraduates

- ⇒ **TASK:** locate and appoint a program lead for the sustainability certificate
- ⇒ **TASK:** develop *terms of reference* and requirements for the certificate
- ⇒ **TASK:** develop and deliver the sustainability certificate

ACTION: facilitate sustainability-focused projects and research for TRU students and faculty

- ⇒ **TASK:** investigate and secure grants and awards for sustainability-focused research projects
- ⇒ **TASK:** inform students of available awards and grants for sustainability-focused projects

GOAL: develop a sustainability reporting system to track objectives, provide transparency and assist planning

CONTEXT AND SCOPE:

Improved environmental performance is a continual process that requires a long-term commitment from TRU. A commitment to standardized performance indicators and regular and transparent reporting and planning offers the best chance for success. The cycle of delineating environmental impacts, measuring their magnitude, setting goals, creating plans to meet those goals and then re-measuring to evaluate performance will be carried out every three years as shown below.

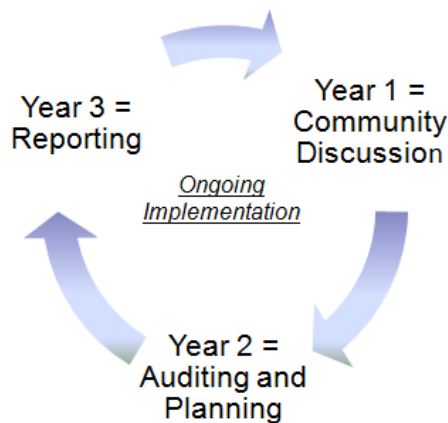


Figure 11. Three-year implementation cycle for the Sustainability Action Plan.

STEPS FORWARD:

ACTION: identify and conduct assessments of TRU's environmental impacts

- ⇒ **TASK:** develop indicators for each of the goals in the *TRU Sustainability Plan*
- ⇒ **TASK:** report and present results of the indicator analysis to the TRU community every third year
- ⇒ **TASK:** review and update methods for measuring indicators as needed

ACTION: develop and release a *TRU Sustainability Plan* every third year

- ⇒ **TASK:** engage in dialogue with the TRU community to inform development of the *TRU Sustainability Plan*
- ⇒ **TASK:** develop the *Plan* through a participatory planning process
- ⇒ **TASK:** finalize a three-year *TRU Sustainability Plan: 2013 - 2015*

References

- ¹TRU Office of the President. "2007-2012 Strategic Plan." *www.tru.ca*. Thompson Rivers University, Web. 14 Dec 2009. <http://www.tru.ca/__shared/assets/2007-2012_strategic_plan8326.pdf>.
- ²Wackernagel, M. and W. Rees. 1996. *Our Ecological Footprint: Reducing Human Impact on the Earth*. Gabriola Island, BC: New Society Publishers.
- ³Global Footprint Network. "Data Sources." *footprintnetwork.org*. 05 Jul 2009. Footprint Network, Web. 14 Dec 2009. <http://www.footprintnetwork.org/en/index.php/GFN/page/data_sources/>.
- ⁴City of Kamloops. "Kenna Cartwright Park." *city.kamloops.bc.ca*. Web. 14 Dec 2009. <<http://www.city.kamloops.bc.ca/parkgardens/kenna.shtml>>.
- ⁵Grasslands Conservation Council of British Columbia. "Species at Risk Introduction." *bcgrasslands.org*. BCGCC, Web. 14 Dec 2009. <<http://www.bcgrasslands.org/grasslands/SAR.htm>>.
- ⁶Stats Canada. "Goods and Services Purchases Resulting in the Highest Indirect Emissions from Households." *statcan.gc.ca*. Web. 14 Dec 2009. <<http://www.statcan.gc.ca/pub/16-002-x/2008004/tbl/gas-gaz/tbl002-gas-gaz-eng.htm>>.
- ⁷Pacific Carbon Trust. "Public Sector Organizations." *pacificcarbontrust.ca*. Web. 14 Dec 2009. <<http://www.pacificcarbontrust.ca/Home/ClientServicesPublicSectorOrganizations/tabid/99/Default.aspx>>.
- ⁸Thompson Rivers University. "Planning Process." *tru.ca*. Web. 14 Dec 2009. <<http://www.tru.ca/vpadmin/campusplan/process.html>>.
- ⁹Heloise. *Heloise: Hints for a Healthy Planet*, p. 56; *101 Ways to Save Money and Save Our Planet*, p. 122.
- ¹⁰Statistics Canada. 2009. Human Activity and the Environment: Annual Statistics. Government of Canada, Ottawa.

Data and Imagery Sources

- #Figure 2 is a public domain image, under Creative Commons licence, reprinted from:
<http://en.wikipedia.org/wiki/File:World_map_of_countries_by_ecological_footprint.svg>.
Author: Jolly Janner
- *Figure 9 GIS data supplied from City of Kamloops open access data:
<http://webserver.kamloops.ca/imf/sites/DataDownload/disclaimer.html>
- **Figure 4 is a public domain image, under Attribution-Share Alike 3.0 Unported licence from:
http://commons.wikimedia.org/wiki/File:Lewis%27s_Woodpecker.jpg

All other data and imagery the property of TRU.

Acknowledgements and Credits

This document relies on the Ecological Footprint Methodology first developed by Mathis Wackernagel and William Rees.

In particular, a spreadsheet developed for university footprint assessments, developed by Chelsea Stewart and Jennifer Loo at the University of Toronto Mississauga, then adapted for use at TRU, was invaluable.

This report was compiled and authored by Adam Hockin a co-operative education student in the TRU Environment and Sustainability Office during summer 2009, with the help of many, many members of the TRU Community.