Summer 2025 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Hub is pleased to offer current UBC graduate students the opportunity to work on sustainability internship projects. Successful candidates work under the guidance of a mentor from the partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region. The pay rate for the summer 2025 program is \$31.25/hour or \$7,812.50 for a 250-hour project.

- Visit the Sustainability Scholars Program website to learn how the program works and to apply.
- Be sure to review the application guide on the Apply page to confirm your eligibility before applying.

Applications close at 11:59 pm on Sunday January 26, 2025.

Project title: Understanding and Managing Artificial Turf Impacts on Rainwater, Urban Heat, and Biodiversity for the City of Vancouver

Project Background & Overview:

It has been observed that some private developments in the City of Vancouver are using artificial turf products in their landscaping treatments, either as new builds or as retrofits. Given that there are documented environmental concerns associated with artificial turf, the city desires to better understand these impacts and potential responses.

As context, the City of Vancouver is facing challenges with respect to the impacts of climate change and implementing climate adaptation measures. Population growth, urban development practices, and climate change are increasing urban heat, reducing biodiversity, raising sea levels, and increasing the frequency and intensity of rainfall, which is impacting community wellbeing, straining the city's aging sewer system, and leading to chronic water quality impacts on receiving waters such as False Creek and the Fraser River.

The City of Vancouver's Climate Change Adaptation Strategy (CCAS, 2024) and other related initiatives seek to address risks associated with impacts from urban heat, sea level rise, extreme rainfall, drought, poor air quality due to wildfire, and biodiversity loss. The Rain City Strategy (RCS, 2019), which was developed in response to the CCAS action plan, calls for a shift to a more holistic and integrated approach for achieving the goals of improved water quality, increased resilience, and enhanced livability. This ambitious approach treats rainwater as a valuable resource and aims to mimic the natural hydrologic cycle by capturing and treating rainwater where it lands using green rainwater infrastructure (GRI) such as green roof systems and ground infiltration systems. Other city strategies that include actions to address rainwater management, urban heat, and biodiversity include the Healthy Waters Plan (in progress), Urban Forest Strategy, and Biodiversity Strategy. Activities that may impede adaptation objectives are of interest to the city.

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Project description

The purpose of this project is to better understand the impacts of artificial turf on three specific climate adaptation challenges: rainwater management, urban heat reduction, and biodiversity enhancement. Specifically, the project seeks to undertake best practices research, subject matter expert interviews, and relevant case studies from other jurisdictions, and provide recommendations for the City of Vancouver to better manage artificial turf on private property as part of its climate adaptation objectives.

Projects that contribute toward advancement of CCAS and RCS implementation goals will contribute to progress on sustainability, climate adaptation, and equity.

Project scope

The scope of this project shall focus on:

- 1. To help the Scholar understand the City of Vancouver context and artificial turf issues, review and summarize:
 - a. The city's climate adaptation challenges, strategies and relevant bylaws, with particular focus on rainwater management, urban heat, biodiversity,
 - b. Policy approach for managing artificial turf (Parks, boulevards, private).
- 2. Literature review, and 3 or more subject matter expert interviews (UBC Microplastics Cluster, CoV Parks, other) on artificial turf systems and their life cycle characteristics.
- 3. Detailed case study research on 2 or more leading jurisdictions, and higher-level review of approaches undertaken by at least 3 municipalities in the lower mainland, with reference to:
 - a. Climate adaptation strategies (rainwater, heat, biodiversity),
 - b. Allowable turf use, rationale for any limitations, and mechanisms to limit use (bylaws, etc.),
 - c. Document lessons learned in developing and implementing any use restrictions, with reference to stakeholder and decision-maker involvement, implementation, and progress reporting.
- 4. Based on the research provide a list of recommendations and actions for the city to consider.

Deliverables

- A draft report Table of Contents, Research Methodology
- A final report containing a summary of the work completed
- A final report for the online public-facing <u>Scholars Project Library</u>.

Time Commitment

- This project will take 250 hours to complete.
- This project must be completed between April 15 (or May 1) and August 1.
- The Scholar is to complete hours between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.

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• Regular weekly check-in meetings as a default. Scholar to be responsible for developing the Agenda.

Required/preferred Skills and Background

⊠ Excellent research and writing skills,

☑ Demonstrated interest in sustainability and climate adaptation (rainwater, urban heat, and biodiversity),

- I Familiarity with developing research methodologies to guide research,
- Ability to plan, coordinate, and implement case study interviews,
- ⊠ Strong analytical skills,
- Ability to work independently,
- ⊠ Deadline oriented,
- ☑ Project management and organizational skills,
- Comfortable interacting with strangers to conduct public/ in person interviews,
- GIS training or experience an asset but not required,
- ☑ Familiarity preparing feasibility studies,
- Design and layout skills are an asset.

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Apply here: Click here to apply

Contact Karen Taylor at <u>sustainability.scholars@ubc.ca</u> if you have questions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 21, 2025. <u>Click here for details and to register.</u>

Below are some links to useful resources to help you with your resume and cover letter (there are many more online). Some of these resources also provide information on preparing for your interview.

https://students.ubc.ca/career/career-resources/resumes-cover-letters-curricula-vitae https://www.grad.ubc.ca/current-students/graduate-pathways-success https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services