

SUSTAINABILITY SCHOLARS PROGRAM

Summer 2020

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on funded sustainability internship projects. Successful candidates work under the mentorship of a partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region.

- Visit the [Sustainability Scholars Program website](#) to learn [how the program works](#) and to [apply](#).
- Be sure to review the [application guide](#) to confirm your eligibility before applying.
- **Applications close at midnight on Sunday February 2, 2020.**

Research project title: Investigating the effectiveness of stormwater source controls in managing urban stormwater quality and quantity.

How will this project make a contribution to regional sustainability?

The 2010 Integrated Liquid Waste and Resource Management Plan (ILWRMP) states that stormwater should be managed at its source to protect the environment. The ILWRMP also identifies managing stormwater as a municipal responsibility while Metro Vancouver's role is to facilitate research on watershed-based stormwater management approaches. As such, Metro Vancouver facilitates the Stormwater Interagency Liaison Group (SILG) and the group's work plan, which includes the update of the "Stormwater Source Control Design Guidelines 2012" (SSCDG) in 2020.

In addition, this project supports:

- Air Quality and Climate Change's stormwater adaptations to climate change
- Regional Planning's Environmental goals to increase Green Infrastructure (GI) implementation, habitat connectivity and urban tree canopy.
- Municipal efforts to reduce Combined Sewer Overflows (CSOs) by improving stormwater runoff retention

Project description

The purpose of the project is:

The objectives include gathering and synthesizing past performance information on the six source control technologies in the existing SSCDG, identifying new technologies and applications, and assessing the relative effectiveness of the existing and new technologies.

Outline the scope of project, including how Metro Vancouver will use the Scholar's work:

Information from this project will lay the foundation for updating the SSCDG which will be undertaken by SILG in 2020.

Review of the source controls currently included in the SSCDG.

- Identify lessons learned on installation, implementation, performance, operations and maintenance
- Determine best application for each source control measure

- Identify limitations and barriers to successful implementation

Identify promising new source controls for possible inclusion in the revised SSCDG.

- Identify new technologies, pre-treatments or new applications
- Identify strategies to deal with limited space in dense urban settings and developing town centres
- Review promising new source controls using the same criteria as the existing SSCDG source controls

Assessment of source control facility relative effectiveness for both water quality and quantity

- Identify effectiveness measures to be used for both quality and quantity
- Gather local and literature data
- Compare the relative effectiveness of each SSCDG source controls and each of the identified new technologies

Project Deliverables:

- Summary of literature review and local site visits/interviews – May 29, 2020
- Draft assessment of both SSCDG and new source control measures – June 26, 2020
- Create PowerPoint summary presentation and present to SILG – July 9, 2020
- A final report [or Executive Summary] for the UBC Sustainability Scholars online project library by July 31, 2020.

Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between May 4 and July 31, 2020.
- The Scholar will work an approximately 20 hours per week.
- The Scholar will attend the July 9, 2020 SILG meeting.

Required/preferred Skills and Background

- Excellent research and writing skills
 - Demonstrated interest in sustainability
 - Familiarity with research methodologies and survey techniques
 - Strong analytical skills
 - Ability to work independently
 - Deadline oriented
 - Project management and organizational skills
 - Familiarity with benchmarking methods and tools
 - Comfortable interacting with strangers to conduct public/in person surveys
 - Familiarity with stormwater and green infrastructure
- Must be able to travel to various locations within Metro Vancouver to attend meetings, conduct interviews and view stormwater source control facilities.
 - Access to a computer and internet or a library to complete the literature review is required



Applications close **midnight Sunday February 2, 2020.**

Apply here: <http://sustain.ubc.ca/scholarsapply>

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

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>

The Centre for Student Involvement & Careers will host a resume & cover letter webinar tailored for graduate students on Tuesday, January 21, 2020 from 12:00-1:30. Registration will open approximately two weeks before the webinar, and can be accessed at Careers Online.

