

## UBC Sustainability Scholars Program 2019

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 organizational sustainability goals.

For more information about the Sustainability Scholars Program and to apply to work on this project, please visit the [Student Opportunities](#) page.

Please review the application guide (PDF) before applying.

Applications close **midnight Sunday March 24, 2019.**

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**Title of Research Project:** Research analysis and development of recommendations for a visual air quality program

### 1. The purpose of the project is:

The purpose of this project is to draft a report that synthesizes the outcomes of the various elements of the Lower Fraser Valley visual air quality pilot study and, where possible, identifies the key features of the study that could be relevant to developing recommendations for a visual air quality program.

Elements of the pilot study included improving air quality agencies' understanding of:

- the economic benefits of improving visual air quality;
- the science underpinning visual air quality degradation in the Lower Fraser Valley;
- measuring visual air quality impairment;
- effective reporting of visual air quality;
- how to assess changes in visual air quality;
- processes to implement potential policies to address improving visual air quality; and
- engaging the public and stakeholders about the visual air quality issue in the Lower Fraser Valley.

Collaborative work on visual air quality has been coordinated through the BC Visibility Coordinating Committee (BCVCC), with members from Metro Vancouver, Fraser Valley Regional District, BC Ministry of Environment and Climate Change Strategy, Environment and Climate Change Canada and Health Canada. Each of these agencies has contributed to the different elements of the project.

### 2. How will this project make a contribution to regional sustainability?

Goal 2 of the Metro Vancouver [Integrated Air Quality and Greenhouse Gas Management Plan](#) outlines a strategy for developing a visual air quality management program for the Lower Fraser Valley airshed in partnership with other government agencies. One of the actions (Action 2.2.2) within this strategy is to "Implement a visual air quality pilot project".

Work on the Lower Fraser Valley visual air quality pilot study is expected to be completed by spring 2019. Results, findings and recommendations arising from the pilot study will inform the development of actions for

improving visual air quality in Metro Vancouver's next air quality management plan. The student will be responsible for synthesizing the findings and outcomes of the pilot study, and identifying key features where possible, to enable agency staff to develop recommendations for decision makers for improving visual air quality.

**3. Outline the scope of project including how the scholar's work will be used by Metro Vancouver:**

The desired outcome of this project is to summarize the current state of knowledge of visual air quality management in the Lower Fraser Valley, based on the Lower Fraser Valley visual air quality pilot study, and to identify the key features of the pilot study that will be relevant to developing recommendations for a visual air quality program. The proposed project will require the scholar to review published and unpublished material from the BCVCC, member agencies, consultants and collaborators, assess and highlight the relevance of the content of that material to the deliverable (e.g. by noting findings that have been superseded by later work), and prepare a report that explains the elements of the pilot study, the methods used to investigate the different facets of visual air quality, and the findings arising from work conducted by the BCVCC and its members during the pilot study.

Resources available include approximately 15 to 20 reports, posters, peer-reviewed papers and presentations, and additional background subject material. All of these resources will be made available to the scholar by the Metro Vancouver lead.

The report produced as the deliverable for this project will form a draft synthesis of the pilot study report being prepared by the BCVCC for member agencies. The deliverable will be used to help craft recommendations by the BCVCC for member agencies and is necessary to inform the development of actions for improving visual air quality in Metro Vancouver's next air quality management plan. The current air quality management plan, adopted in 2011, contains a high level goal to "improve visual air quality" and this report will inform the development of a new goal and metrics to assess performance towards that goal. It is anticipated that the deliverable will also inform the work of other BCVCC member agencies on visual air quality management, including the FVRD as they develop their next air quality management plan.

**4. Project Deliverables:**

The main project deliverable is a report that describes the outcomes of the Lower Fraser Valley visual air quality pilot study and identifies the key features of the pilot study that will be relevant to developing recommendations for a visual air quality program. The report should be:

- based on existing reports and literature produced by the BCVCC, members of the BCVCC, contractors hired by BCVCC members, and other collaborators;
- a synthesis of the results from the seven elements of the pilot study; and
- written using a report framework provided by the BCVCC.

The report should include a list of the references used to produce the report.

It is expected that a draft report will be provided for review by Metro Vancouver before the end of the project and prior to completion of the report. A webinar presentation of the report to BCVCC representatives may also be requested, depending on the availability of all parties.

**5. Identify the required/preferred skill set and knowledge base for the ideal Scholar.**

- Excellent research and writing skills
- Ability to work independently
- Demonstrated time management skills
- Deadline oriented
- Excellent presentation skills

- A good understanding of air quality
- Scholars with an educational background from a wide-range of disciplines, encompassing science or economics, are expected to be able to successfully complete the project.
- Other:
  - Familiarity with synthesizing technical information in plain language would be an asset.
  - Knowledge about the role each agency involved in the BCVCC plays with respect to air quality in the Lower Fraser Valley would be helpful.

**6. Should the potential Scholar submit a writing sample?**

- Yes
- No

**7. Identify specific requirements required for completing this project**

- Familiarity with reviewing technical documents.
- Familiarity with air quality issues in the Lower Fraser Valley.
- Excellent written English.
- Ability to synthesize technical data and describe it in language appropriate to the audience.
- Access to a computer and software capable of producing documents in Microsoft Word format.

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Apply here:

<https://sustain.ubc.ca/student-opportunities>

To learn more about the program here:

<https://sustain.ubc.ca/ubc-sustainability-scholars-program>

Contact Karen Taylor at [sustainability.scholars@ubc.ca](mailto:sustainability.scholars@ubc.ca) if you have questions.