

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 Monday February 25, 2019.**

Research project title: Adapting to Sea-Level Rise in Vancouver's Employment Lands: Current Best Practices and Approaches in Planning

Research supports the following City of Vancouver policies -

- Greenest City Action Plan. Specific goal area (s): Climate Leadership, Green Economy
- Healthy City Strategy. Specific goal area (s): Making Ends Meet and Working Well, Environments to Thrive In
- Other: Vancouver's Changing Shoreline: Preparing for Sea Level Rise

Outline scope of project and why it is of value to the City of Vancouver and describe how and when the scholar's work will be actionable

Scope of work:

- Undertake a literature review of best practices (e.g. related to urban design, public space use & design, built form, land use planning, and flood management infrastructure) used by cities around the world and in the region, including existing work conducted at the City of Vancouver, to understand and plan for the impacts of sea level rise on employment lands, including industrial and port related uses.
- Develop a survey to send out to government agencies and port authorities to assess their understanding of sea-level rise, how it will impact their long-range plans, and the extent to which they have analyzed the economic impact of sea level rise on employment uses.
- Conduct phone interviews with selected government agencies, port authorities and Metro Vancouver to understand how they are planning for sea-level rise and its impacts on employment lands and associated economic impacts. Other cities and agencies outside of BC may include, but are not limited to, Toronto ([Waterfront Toronto](#)), New York City, Boston, Norfolk (Virginia), Seattle,

Tacoma. Local cities and agencies may include City of Surrey, City of New Westminster, City of Burnaby, the Vancouver Airport, Metro Vancouver and the Port of Vancouver.

- Work with staff to examine and implement options to inventory economically significant private/public infrastructure (i.e. docks) and regionally significant industries that exist in the floodplain and that may be impacted by future sea level rise.

Why this work is of value:

The City of Vancouver is developing a long-range policy plan to ensure that Vancouver has an appropriate supply of land to support future jobs and the growth of the economy. As part of this review, the City will need to account for the impacts of sea-level rise on Vancouver's employment lands – many of which are located in floodplains. The impacts of sea-level rise will be especially felt in Vancouver's industrial areas, 50% of which are located within Vancouver's flood plain.

The City has hired a consultant to conduct technical forecasting of Vancouver's employment land needs up to 2050 (which includes the impacts of sea level rise on jobs capacity). One of the gaps in this research is developing a qualitative understanding of what other government agencies, port authorities and economic actors are currently doing in the region and internationally to account for the impacts of sea level rise in employment areas. Another gap is understanding the impacts of sea level rise on economically significant infrastructure (i.e. docks) and industries located within flood plains. The scholar's work will need to be completed in 2019 while the team conducts the Employment Lands and Economy Review. The Employment Lands and Economy Review will go to Council in early 2020.

Deliverables

- Summary of best practices research in regards to planning for sea level rise in employment areas in Metro Vancouver and around the world
- A questionnaire, to be used in phone interviews with Metro Vancouver, government agencies and port authorities (to be developed in partnership with Employment Lands team)
- Summary of results from interviews with government agencies and highlighting key findings from analysis.
- Methodology and initial findings from an inventory of economically significant infrastructures and industries that may be impacted by sea level rise.
- Internal presentation on initial findings to city staff
- A public facing final report (or executive summary) for the UBC Sustainability Initiative website

Time Commitment

- This project will take 250 hours to complete, with an estimated work breakdown as follows:
 - 10% literature review and best practices research
 - 5% Survey development
 - 20% Conducting Surveys
 - 10% Data Analysis
 - 25% Inventory of economically significant infrastructure and industries
 - 30% Final Report/Presentation

- This project must be completed between May 1st and August 1st
- The scholar is to complete hours between 9am and 5pm, Monday to Friday, approximately 20 hours per week.

Skill set/background required/preferred

- Excellent research and writing skills.
- Strong technical writing skills
- Familiarity with research methodologies and survey techniques
- Strong analytical skills
- Ability to work independently
- Demonstrated time management skills
- Familiarity with qualitative research methodologies and implementation
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- Comfortable interacting with strangers to conduct public/in person surveys
- Writing sample required.**
- GIS training or experience would be an asset

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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>

Read the application guidelines to confirm your eligibility to participate in the program here:

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

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