

Summer 2024 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. These opportunities are paid. The pay rate for the summer 2024 program is \$27.50/hour or \$6,875 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 midnight on Sunday January 28, 2024.

> This is a Fraser Estuary Research Collaborative Project <

The [Fraser Estuary Research Collaborative](#) (FERC) is focussed on advancing efforts to protect the Fraser River estuary in collaboration with key NGO and Indigenous partners. If you are interested in producing new knowledge and supporting Fraser estuary protection through scientific, technical, governance and policy innovations, the following project might be for you.

Successful candidates are expected to attend workshops and other events in the lower mainland in person.

Project title: Research on Teal Carbon to inform nature-based floodplain management in the Lower Fraser

Project Background & Overview:

“Teal carbon” is the carbon stored and sequestered by freshwater wetlands, primarily in their soils. Research has shown that freshwater wetlands have the potential to sequester carbon at significant rates, with 20-30% of terrestrial carbon being stored in wetlands. Unlike the carbon stored in forests, the carbon in wetland soils can be maintained for millennia as soils are buried.

While 75-80% of the wetlands in the Lower Fraser have been lost or harmfully impacted by industrial, urban and rural development, including diking and draining, there is growing momentum, policy support and funding for habitat restoration and nature-based flood risk reduction.

Previous research in the region has looked at the ‘blue carbon’ stored in salt and brackish marshes in the estuary, therefore, it is timely to consider the teal carbon resources associated with existing and potentially restored freshwater wetlands.

This project will contribute to the larger sustainability issue of how we adapt to climate change in the Lower Fraser, including events like the 2021 atmospheric river event, employing multi-benefit measures that reduce flood risk, contribute to river and waterway ecosystem restoration and recovery, and support resilient communities for the long term.

Teal carbon is an important lens to consider when exploring nature-based approaches to floodplain management and flood risk reduction.

The project work will support the ongoing work of the Lower Fraser Fisheries Coalition, see <https://www.resilientwaters.ca/floodresilience> which is helping to develop a principled, strategic plan for regional action to manage flood risk in the Lower Fraser, through convening, catalyzing and advocacy activities.

The work will contribute to the technical basis and impetus for developing nature-based flood management in policy and practice.

Project scope

- Research and document the concept of teal carbon, how it works, and how it is measured, based on existing literature and examples (including, for example, current work of the Micrometeorology Lab at UBC in Manitoba).
- Building on the analysis above, undertake desktop research and expert interviews (including with local governments) to identify and collect what data is available on the Lower Fraser, (e.g., through water quality analysis as it sounds like water chemistry is important for teal carbon).
- Explore options and opportunities for evaluating teal carbon in the Lower Fraser, including data availability and needs, and potential linkages to nature-based flood management projects and policy.
 - The linkages to nature-based flood management projects and policy would be determined based on examples from other jurisdictions (if there are any) and dialogue with the project team.

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing [Scholars Project Library](#).

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15, 2024
- The Scholars is to complete their hours between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.

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

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- ☒ Project management and organizational skills
- ☒ Strong technical and drafting skills
- ☒ Experience or interest in carbon sequestration, freshwater wetlands, carbon emissions abatement, nature-based solutions, flood risk reduction, and related topics would be an asset.

Applications close **midnight Sunday January 28, 2024**

Apply here: [Click here to apply](#)

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

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 23, 2024. [Click here for details and to register.](#)

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>