

## 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.**

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### > 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: Policy & Regulatory Review of Passive Flood Water Storage to Mitigate Flood Risk**

#### **Project Background & Overview:**

The Emergency Planning Secretariat, with support from Ebbwater Consulting, has been working to understand the capacity for flood storage if sloughs and tributaries were reconnected to the main stem of the Fraser River. This question is important within the context of climate change as sea level rise and changing seasonal conditions make water levels and the severity of flooding hazards such as freshet and storms unpredictable. By getting a better sense of the storage potential in the Lower Mainland, local governments and First Nations can prioritize certain areas to open to the Fraser River. Flood storage is also valuable for salmon habitat and restoration, as opening up blocked sloughs and tributaries to mitigate flood risk also opens up these waterways for creatures that live in the water.

Another component of flood storage that we hope to examine, in tandem with this project is passive storage. Passive storage involves the temporary storage of floodwaters on the floodplain in non-waterways, such as agricultural farmland through waffle-storage, setback dikes, or other storage options. This storage should be evaluated in the Lower Fraser Region because many communities, homes, and critical infrastructure are already at risk and the threat of climate change could exacerbate that risk, requiring even more space to store floodwater. Passive storage can be an adaptive management strategy to utilize as climate change worsens, but we need to determine how it can be implemented in this region.

## Project description

The purpose of this project is to understand the policy and regulatory landscape around passive flood water storage so that the Emergency Planning Secretariat and our partners are better equipped to advance this flood storage option in the region.

Increasing the region's flood storage capacity reduces overall risk during flood hazards such as freshet and storms. Furthermore, passive storage, when implemented correctly can benefit those who give up land for water storage as it prevents flooding in vulnerable locations, while compensating the landowner.

## Project scope

1. Literature Review on Passive Storage around the world: identify the types of passive storage (e.g., waffle storage, set-back dikes, other), what type of land is most suitable, how to determine the most suitable land, how landowners are compensated for passive storage, and usefulness during floods. This activity will help guide the approach to passive storage implementation in the Lower Fraser Region.
2. Scan of existing policies that either enable or inhibit the implementation of passive storage. We need to be aware of policy levers that can help move the process along. More importantly, we need to be aware of policies that inhibit the utilization of passive storage in the floodplains. By understanding our limitations, we can explore strategies to circumvent obstacles or advocate for regulatory changes.
3. Identify funding mechanisms that are available to advance passive storage in the Lower Fraser Region. Evaluate funding mechanisms through the lens of landowners to ensure that passive storage can be implemented and those that choose to implement are compensated for their efforts and loss of viable land during floods. This activity is vitally important as passive storage typically happens on farmland. Without farmer support, passive storage will not occur, so we need to identify avenues to bring them alongside in a way where they feel included and secure that their efforts will produce benefits for the region and themselves.

## 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

# SUSTAINABILITY SCHOLARS PROGRAM

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Strong technical and drafting skills
- Experience doing policy and regulatory research and analysis, an asset
- Familiarity with flood mitigation methods and strategies, an asset

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

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

Contact Karen Taylor at [sustainability.scholars@ubc.ca](mailto: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>