

[TransCoastal Adaptations Centre for Nature-Based Solutions](#) (TCA) at Saint Mary's University is seeking a full-time **Research Associate (Carbon Accounting)** for the *Making Room for Wetlands (MRFW)* projects. Through these projects, tidal wetland habitat and natural hydrology will be restored through managed dyke realignment within multiple estuaries in Nova Scotia resulting in increased carbon sequestration. Working closely with the Province of Nova Scotia, this project will restore valuable tidal wetland habitat, reduce greenhouse gas emissions by sequestering carbon, mitigate riverine flooding and increase the resilience of the province's dykelands. The Research Associate will be responsible for all aspects of carbon reporting for the MRFW projects, including but not limited to data collection including measuring greenhouse gas emissions and core collection, overseeing student lab and field work, reporting, editing, and compiling project data, collaborating with the project team, and reporting soil organic carbon values, carbon accumulation rates, and GHG emissions to Environment and Climate Change Canada (ECCC) as per the Nature Smart Climate Solutions Fund. They will be responsible for correspondence and collaboration with ECCC for any requests to contribute data to the National Inventory Report as needed.

Position Title: Research Associate (Carbon Accounting)

Start date: June 2023

Salary: \$48,630 - \$54,600 commensurate with experience, plus benefits

Status: Full-time (35 hrs a week)

Duration: End Date March 31st, 2027

Location: Halifax, Nova Scotia

TransCoastal Adaptations (TCA) is a Centre of Expertise for nature-based adaptation to climate change at Saint Mary's University. Our mission is to help build climate resilient coastal communities and ecosystems by protecting, enhancing, and restoring natural processes through innovative research and collaboration, implementing nature-based adaptation solutions. The Research Associate will be based at Saint Mary's University, reporting to Dr. Danika van Proosdij, Executive Director of TransCoastal Adaptations Centre for Nature-based Solutions. They will join a dynamic, passionate, and energetic team at TCA who are committed to applying innovative nature-based climate change adaptation solutions on the ground.

RESPONSIBILITIES

- Data collection including measuring greenhouse gas emissions of CO₂, CH₄ and N₂O from field sites, both pre- and post-restoration; quantification of soil carbon sequestration through the collection of soil cores; use and upkeep of an automated GHG analyzer (Gasmeter GT5000) and autochamber system;
- Analyze data using statistical software and other tools to measure greenhouse gas emission rates, assess carbon accumulation rates and measure carbon stocks;

- Reporting, editing, and compiling up-to-date project data and knowledge transfer with project partners, government officials, the MRFW Project Manager and TCA members;
- Prepare data for submission to ECCC and National Inventory Report (as needed);
- Collaborate with the project team to integrate carbon accounting data into project planning and decision-making processes;
- Oversee students and interns for lab and field activities and ensure all safety procedures are followed;
- Develop research and fieldwork plans and methodologies to measure and track carbon sequestration over the course of the projects, including updating and maintaining the carbon accounting standard operating procedures;
- Participate in project meetings and workshops, and engage with stakeholders and partners as needed;
- Other duties as required.

PROFILE

We are looking to hire a dedicated and flexible professional who thrives in a dynamic academic environment and who strives to support the success of the project and the research team. The Research Associate will be knowledgeable about nature-based solutions, greenhouse gas emissions and carbon accounting, and committed to and passionate about the environment.

Skills and Qualifications:

- Completion of post-graduate education in a related field such as geography, environmental science, environmental management, earth sciences, planning, or a related field; or equivalent experience;
- Completion of a PhD is an asset but not required;
- Demonstrated, practical hands-on experience in carbon sequestration and GHG emissions accounting, with a strong understanding of the science and theory;
- Experience working in the field required;
- Ability to troubleshoot unexpected problems and develop innovative solutions;
- Experience with carbon sequestration and GHG emissions literature review;
- Experience with statistical software required;
- Experience coding in Matlab, R or other programming language would be considered an asset;
- Demonstrated experience in relationship building and engagement;
- Must have strong written and oral communication skills;
- Must have strong organizational and time management skills;
- Must be highly motivated, independent and hard-working;
- Must be able to undertake strenuous activities, work long hours in the field, navigate difficult terrain, must be comfortable working in/near mud and water, and must be able to carry ~50 lbs;
- Flexibility to occasionally work outside of normal office hours, including evenings and weekends to complete necessary field work;
- Have an in-depth understanding of climate change impacts and adaptation in coastal regions;
- Experience working with First Nations Communities is considered an asset;
- Must have a valid driver's license;
- Must be a Canadian citizen, Permanent Resident of Canada, or legally entitled to work in Canada.

APPLICATION

To apply: If you are interested in this position, please send a cover letter describing your background and fit to the position, along with a resumé or CV and list of references, merged into one document, via email to Dr. Danika van Proosdij, dvanproo@smu.ca and please copy the Making Room for Wetlands Project Manager, Morganne Robben, morganne.robben@smu.ca.

Application deadline: Open until filled. We will begin reviewing applications June 5th, 2023. We thank all applicants, however, only candidates selected for an interview will be contacted.

At Saint Mary's University, equity and diversity are integral to excellence and enrich our community. As an institution committed to fostering an environment of inclusion and respect, we welcome applications from women, Indigenous peoples, racialized persons/visible minorities, persons with disabilities, persons of minority sexual orientation or gender identity and others who might contribute to the growth and enrichment of our community. Applicants are encouraged to self-identify. If you require accommodations during the recruitment process, please contact Talent Acquisition at hr@smu.ca.