



CNAES

HQP Research & Collaborative Exchange Funding

Visit report

1. Exchange information

Visitor[s]:

Karl A. Lamothe, PhD Candidate, University of Toronto, Project III-4
Camille Ouellet-Dallaire, PhD Candidate, McGill University, Project III-1
Maitane Erdozain, PhD Candidate, University of New Brunswick, Project II-2
Stephanie Tomscha, Post-doctoral Researcher, University of British Columbia, Project II-3

Supervisor[s]:

Donald Jackson, University of Toronto
Keith Somers, University of Toronto
Bernhard Lehner, McGill University
Karen Kidd, University of New Brunswick
Sarah Gergel, University of British Columbia

Conference:

Society for Freshwater Science Annual Meeting: Designing our Freshwater Futures
Raleigh, North Carolina, USA
June 4-8, 2017

2. Objective/Purpose

This travel grant was written to provide funds for CNAES HQP to travel to Raleigh, North Carolina for the 2017 Society for Freshwater Science Annual Meeting where we had a special session titled, "Understanding and mitigating change in freshwater ecosystem services." The successful proposal for this session was submitted by Karl Lamothe, Camille Ouellet-Dallaire, Stephanie Tomscha, and Donald Jackson. Below is the abstract for the session:

Over the last two decades the ecosystem services (ES) approach has developed into an internationally recognized framework for understanding the services that humans derive from nature. In freshwater ecosystems these services range from the tangible, extractable goods such as fish and clean drinking water, to more regulatory services that maintain ecosystem conditions (e.g. nutrient cycling, flood mitigation). However, the benefits that freshwater ES provide are threatened by the effects of human development, pollution, invasive species, agriculture, and climate change, among others. Our symposium will broadly examine the use of the ES approach for monitoring and addressing changes in freshwater ecosystems as a result of anthropogenic disturbances. Applying an ES lens requires a thorough understanding of the links between ecosystem structure and functions with ES. This is a large order as freshwater ecosystems are often one piece of a complex, socio-ecological system with multiple beneficiaries. As a result, ES research can cover many different topics and offer various quantitative and qualitative tools for evaluating the benefits derived from freshwater ecosystems. These techniques can in turn offer insight towards management and policy decisions for mitigating undesirable change and ensuring the provisioning or flow of ES into the future. Presentations will focus on identifying and characterizing the underlying science of freshwater ES experiencing change, methods for quantifying and mapping trends in ES across a variety of regions and scales, and contribute new ideas to how an ES approach can lead to new solutions in the form of changes to management and policy.



3. Description of the visit

Our special session was held on June 8, 2017. The speakers, which included John Gunn (Laurentian University), Camille Ouellet-Dallaire (McGill University), Maitane Erdozain (University of New Brunswick), Stephanie Tomscha (University of British Columbia), and Karly Harker (University of British Columbia), did a wonderful job. Overall, the special session was moderately attended, with noteworthy audience members from the United States Environmental Protection Agency, United States and Canadian universities, and fellow CNAES members. In addition to the members of CNAES presenting in this special session, other CNAES members were presenting at the conference including Alex Yeung (University of British Columbia), Karen Alofs (University of Toronto), John Richardson (University of British Columbia), Vanessa Bourne (Laurentian University), and Irena Creed (Western University).



Left to right: Karl Lamothe, Maitane Erdozain, Camille Ouellet Dallaire, Stephanie Tomscha, Karly Harker