



CNAES

HQP Research & Collaborative Exchange

Funding

Visit report

1. Exchange information

Visitor: Francesco Accatino, Post-doctoral Fellow, Western University

Supervisor: Irena Creed, Western University

Host: Dr. Marian Weber, Alberta Innovates Technology Futures, Edmonton, Alberta

2. Goals

The purpose of my trip to Edmonton was to work with Marian Weber at Alberta Innovates Technology Features (a partner of CNAES network). More specifically the objective was to discuss the outcomes of my previous research on wetland functions and plan a model for simulating land use change and its impact on wetlands. These topics fall into the purposes of Theme 2, Project 4. ([Identifying desired social, economic, and aquatic ecosystem services futures and policy implementation needed to sustainably manage forest ecosystems](#)).

3. Description of the visit

On the 1st day (October 21st) I went to Alberta Innovates and I spent considerable time with Marian Weber planning to write a paper presenting the results of the research I produced in the first year of my post-doc with the supervision of Irena Creed and Marian Weber. The paper will describe the unintended outcomes of assigning scores to wetland aggregating the wetland functions with different techniques.

On the 2nd day (October 22nd) I discussed with Marian Weber the rules to implement in the model of land-use change. This model will explore the feedbacks between urban expansions and ecosystem functions provided by wetlands. It will also simulate how the urban expansion drives the restoration of wetlands and how the benefits change over time. The same day also Marius Cutlac (working from Alberta Innovates Technology Features in Calgary) joined us and participated to the discussion. Its presence was important because he had data, and we could discuss together what was feasible and what was not.

On the 3rd day (October 23rd) Marius Cutlac and I analyzed all the data that could be used for implementing the model and the data were transferred to me. We were particularly careful in transferring all needed data and to have the same datasets from multiple sources and in different formats, where possible.

Overall, I consider my trip to Edmonton very successful. I came back with very clear objectives, with many new ideas, and with all the data I need. This will be surely beneficial for my future work for the CNAES network. I am thankful to the CNAES Scientific Committee that funded this trip for me.