

SEARCH TERM: Governance (and synonyms) – 3 Projects

Co-Creation of Indigenous Water Quality Tools

- Identification of emerging legal regimes and institutional norms for water governance relevant to Canada

Linking Water Governance in Canada

- PhD student Erin Murphy-Mills completed an exhaustive study of the drivers of eutrophication in the western Lake Erie basin, and evaluated the extent to which they are accounted for in the water governance system. Core findings will be published in three manuscripts, which will be submitted shortly after her defense in early 2022. We also delivered presentation and briefings to key organizational actors in the Ontario provincial government, and to the Great Lakes Water Quality Board of the International Joint Commission.
- Post-doc Bereket Isaac completed a novel study that explored how the perspectives of new Canadians are serving as a driver in water governance systems in Ontario. New Canadians from other parts of the world bring different expectations regarding governance, and the extent to which our governance system accounts for these will influence outcomes.
- Dustin Garrick, Rob de Loë and Fabiola Alvarado completed a study of drivers from the agriculture sector that shape water governance outcomes globally, and which have implications for governance in the Great Lakes basin.
- An improved understanding of the role and importance of external drivers from adjacent action situations on governance for water in the Lake Erie basin, and beyond.

Integrated Modeling Program for Canada

- **Model intercomparison:** now underway for the Nelson-Churchill by Dr. Stadnyk's team to produce scenarios under i) no regulation, ii) with regulation, and iii) under climate change. The team has attracted contributions from many stakeholders, employed a project manager, meets now on a monthly basis, and is receiving results from the first stage of the work.
- Implement a validated MESH-GeoSpace-RIVICE natural and regulated river systems in a platform which allows data streaming and flood warning issuances (Saint John River).
- Apply models in regulated basins with streamflow and process outputs to assess model set up accuracy and performance in representing human impacts in the Nelson-Churchill river basin.