



ALBERTA INNOVATES

Research and Innovation Project – Knowledge Transfer Summary

- Project Title:** Adaptation to Changing Water in Alberta
- Project No:** 2344
- Project Lead:** Greg Goss and Monireh Faramarzi, University of Alberta
- Partners:** Alberta Innovates, University of Alberta, Alberta Agriculture and Forestry (AAF), Alberta Biodiversity Monitoring Institute (ABMI), University of Regina, Eawag Switzerland, Alberta WaterSMART
- Status:** Ongoing

Project Summary:

Alberta's economy depends on an adequate and predictable supply of water. Water intensive industries including irrigated agriculture, industries reliant on hydroelectric power, and the oil and gas sector all require predictable water for a healthy future. However, climate change and climate variability will undoubtedly alter the spatial and temporal water supplies for the province of Alberta. Understanding the dynamics of the different water flows and endowments in space and time is needed to allow timely policy decisions and better targeted investments in efficient water infrastructures and management facilities. Events such as the 2013 flood in Calgary and the summer drought in the Edmonton region in 2015 necessitate that proper mitigation measures be adapted to accommodate future climate variability and future climate change scenarios. The economic and social costs of poor decisions for adaptation cannot be overstated. This project will seek to convey to stakeholders the risks and opportunities to their future growth scenarios as a result of changes in future local water availabilities. Long-term integrated water management requires all sectors of the economy: agriculture, ecosystem services, municipal, industrial and energy (both oil and gas and hydroelectric) to collaborate to ensure there is enough water, when we need it, to ensure a strong economy.

Outcomes:

None available.

Links:

[Watershed Science and Modeling Laboratory](#)

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