



ALBERTA INNOVATES

Research and Innovation Project – Knowledge Transfer Summary

Project Title: Seasonal Operational Model for Water Management within Irrigation Districts
Project No: 2336
Project Lead: Evan Davies, University of Alberta
Partners: Alberta Innovates, University of Alberta, Mitacs, Optimal Solutions Inc, City of Calgary, Irrigation Districts
Status: Ongoing

Project Summary:

In Alberta, Irrigation Districts manage water licenses, internal storage reservoirs and canals, and influence annual crop demands. Gross diversions over the last two decades have been reduced through increased water-use efficiency; however, further improvements are possible. The project will contribute to improved efficiency by developing a tool that will help optimize seasonal operations of irrigation reservoirs using a computerized “Multiple Time-Step Optimization” (MTO) approach. The resulting “water savings” offer the opportunity to increase stream flow, thereby supporting ecological processes, and/or provide additional water that can be used to reduce the risk of drought or support future expansion of irrigated lands.

Outcomes:

None available.

Links:

None available.

Alberta Innovates Contact:

Dallas Johnson

dallas.johnson@albertainnovates.ca