

## Source Water Protection Phase I: Risk Assessment Tools and Data

In 2020, the Alberta Water Council created a "Guide to Source Water Protection (SWP) Planning". The Guide outlines six steps to help drinking water providers develop SWP plans. This project builds on Steps 1 and 2 of the Guide: "Involve key groups and create a vision" and "Characterize your Source Water Area". A web tool and educational resources will be developed to help drinking water providers and local decision makers understand and assess risks to their drinking water sources. Recommendations will be made for an implementation phase to support mitigation of risks and a future strategy for SWP in Alberta.



**RECIPIENT:**  
Alberta Water  
Council



**PARTNERS:**  
Multiple Water  
Stakeholders



**TOTAL BUDGET:**  
\$599,842



**AI FUNDING:**  
\$199,425



**PROJECT DATES:**  
JUL 2023 –  
NOV 2024

## APPLICATION

The web tool will support the implementation of the steps outlined in the Guide to Source Water Protection Planning, specifically Step 2 (Characterize your Source Water Area). The tool will be used by drinking water providers and local decision makers for SWP planning. In particular, the tool will be useful for many small urban and rural municipalities that do not have the resources to manually acquire and process the data required for SWP planning.



ALBERTA INNOVATES

# CLEAN RESOURCES

ENVIRONMENTAL INNOVATION

WATER INNOVATION

## PROJECT GOALS

The purpose of this work is to develop a web platform and educational tools and resources to assist drinking water providers and local decision makers in Alberta to understand and assess risks to their drinking water sources. This work will also support the integration of SWP approaches and to enable greater collaboration between drinking water providers and stakeholders to ensure alignment with local priorities, statutory and non-statutory watershed management initiatives, and regional plans. Finally, this project will include the development of recommendations for an implementation phase to support mitigation of risks and a future strategy for SWP in Alberta.

## BENEFITS TO ALBERTA

The main objective of SWP is to maintain and improve the quality of a given water source which has a range of social, economic, and environmental benefits. The web tool developed through this project will support SWP planning by allowing more time- and cost-efficient data analysis. Ideally, this will result in more SWP plans developed in Alberta, especially in small urban or rural areas where such barriers typically exist. An accessible, central hub of information and data will also lead to improved decision-making in source water areas province-wide.



**2 Students  
Trained**



**8 Practices  
Informed**



**1 New  
Product/Service**

**CURRENT  
STATUS**

**AUG 2023**

The project recently kicked-off. The first milestone will be complete in June 2024.