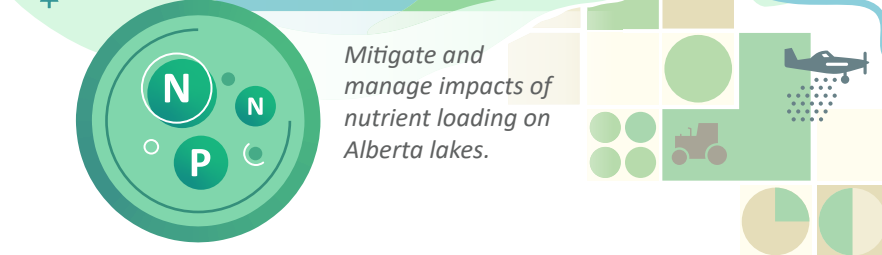



Improve understanding of the efficacy of wetland restoration and reclamation.




Mitigate and manage impacts of invasive species.




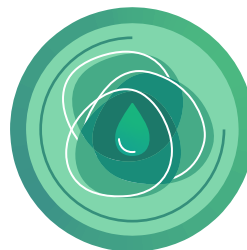
Mitigate and manage impacts of nutrient loading on Alberta lakes.



Mitigate and manage impacts of human-derived contaminants on aquatic ecosystems.



Improve understanding of cumulative landscape-level impacts and develop mitigation strategies.



Develop tools and strategies to conserve and enhance riparian areas.



THEME 2 Healthy Aquatic Ecosystems

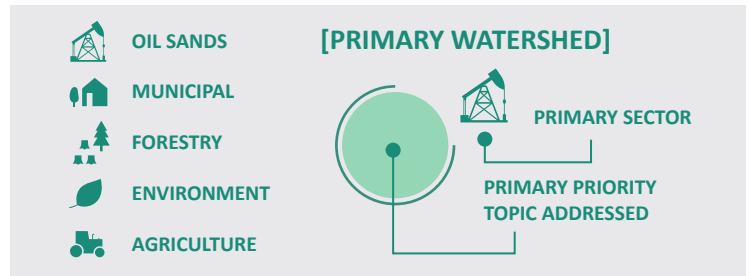
Healthy aquatic ecosystems are vital to a high quality of life for Albertans and provide critical ecological goods and services. Alberta's growing population and economy, coupled with increasing impacts from climate variability and global change, will impact the health of aquatic ecosystems. Tools and strategies are needed to mitigate and manage these impacts.

Alberta Innovates supports healthy aquatic ecosystems through projects which address key knowledge gaps and inform development of new tools and strategies.

THEME 2

Projects by Watershed

Projects supported by Alberta Innovates are protecting healthy aquatic ecosystems across Alberta's major river basins.



NORTH SASKATCHEWAN RIVER BASIN



University of Alberta
A geospatial tool for assessing watershed integrity and aquatic ecosystem health

SOUTH SASKATCHEWAN RIVER BASIN



University of Lethbridge
Expanding functional flows—floods, floodplains and groundwater

University of Lethbridge
Sustaining healthy river valleys: health assessment tools for the South Saskatchewan River Basin



University of Waterloo
Wetland ecosystem functions—drivers, evaluation and management implications

Miistakis Institute
Supporting municipalities in the ecological management of water systems

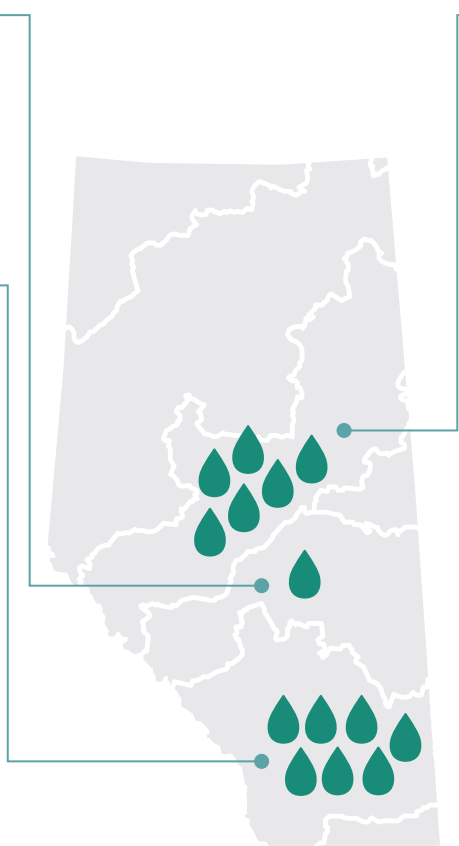


Eastern Irrigation District
Method development to apply potash to irrigation pipelines for the control of invasive mussels



Alberta Agriculture and Forestry
Nutrient objectives for small streams in agricultural watersheds of Alberta

Alberta Agriculture and Forestry
Nutrient objectives for small streams in agricultural watersheds—Phase II



ATHABASCA RIVER BASIN



University of Alberta
Trace elements in the Athabasca river and their relevance for the protection of aquatic life



University of Calgary
COSIA-NSERC AI IRC Wetland Reclamation



University of Alberta
Mammalian and zebrafish toxicity of raw and treated oil sands process-affected waters

University of Alberta
Characterization of oil sands process-affected water fractions and their toxicity

University of Alberta
Bioavailability of trace elements in natural and industrial particles of the Lower Athabasca

Meta Analytical
Using passive samplers for ecological hazard assessment of oil sands process-affected water

PROVINCE WIDE



University of Alberta
Integrating DNA-based testing into an Alberta-wide community-based monitoring program



University of Alberta
Alberta Land Institute—wetlands research strategy for Alberta

Ducks Unlimited Canada
Alberta Wetland Classification System Field Guide



C-FER Technologies
Improving technologies for detecting submerged oil

University of Alberta
Rapid multi-parameter assessment of natural recreational waters in Alberta