

AGRICULTURE AND ENVIRONMENT

ENVIRONMENTAL INNOVATION

LAND MANAGEMENT SOLUTIONS

FUNDING DETAILS

Boreal Ecosystem Recovery and Assessment

The Boreal Ecosystem Recovery and Assessment (BERA) project is a multi-sectoral partnership that is researching how seismic lines affect the natural dynamics of Alberta's boreal forest and developing the knowledge and software tools needed to restore fragmented landscapes.



BOREAL ECOSYSTEM RECOVERY & ASSESSMENT



RECIPIENT:

University of Calgary

Greg McDermid



PARTNERS:

ABMI,
AI-Pac,
Cenovus,
Conoco Phillips,
CNRL,
Imperial Oil,
Natural Resources Canada, and
NSERC



TOTAL BUDGET:

\$1,107,618



AI FUNDING:

\$495,061



PROJECT DATES:

MAR 2025 –
DEC 2026



PROJECT TRL:

Start: 4
End: 7

APPLICATION

The project will promote the return of existing seismic footprint to forest cover, which will have beneficial effects, including enhancing woodland caribou habitat and restoring soil carbon dynamics. The research will provide knowledge and planning tools for government, resource managers, and researchers engaged in boreal restoration, and will train the next generation of highly qualified personnel working in this space.



ALBERTA INNOVATES

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PROJECT GOALS

The objective of the project is to validate new AI technology for planning and monitoring seismic line reclamation. This will be tested within the context of new regulations coming from Transport Canada allowing the use of drones Beyond Visual Line of Sight (BVLOS) for operational monitoring.

BENEFITS TO ALBERTA

The project will facilitate reclamation of seismic lines in the oil sands region, which will reduce forest fragmentation and the risk this poses to sensitive species and ecosystems. The technology that is being developed will support job creation, both directly through the use of the technology, and indirectly, by facilitating the broader effort associated with landscape-scale reclamation of seismic lines in targeted caribou management ranges. The HQP trained by this project will have a unique skillset and are expected to be heavily recruited.

CURRENT STATUS

NOV 2025 - IN PROGRESS

Data has been collected on a number of seismic lines has been completed and analyses is currently underway.