
LET US TELL YOU ABOUT OUR

Big YEAR



Miistakis
Institute

2021/2022
ANNUAL REPORT

INNOVATIVE RESEARCH.
ENGAGED COMMUNITIES.
HEALTHY LANDSCAPES.

2022

City of Calgary

**ENVIRONMENTAL
ACHIEVEMENT
AWARD WINNER**





RELOCATED TO
Mount Royal University's
**TRICO CHANGEMAKERS
STUDIO**

A photograph of two spotted deer in a forest. The deer are in the foreground, facing right, with their heads down as if grazing. The background is a dense forest with many trees and green foliage. The image has a greenish tint. Overlaid on the image is text: "LEARNING HOW" in large white bold letters, "we can become a better" in a white script font, and "INDIGENOUS ALLY" in large white bold letters. There are two thin white horizontal lines, one above and one below the word "LEARNING".

LEARNING HOW

we can become a better

INDIGENOUS ALLY

A hiker with a dog on a mountain trail. The hiker is wearing a blue backpack and a pink shirt, walking away from the camera on a dirt path. A dog is walking alongside her. The background is a lush green forest of evergreen trees, with snow-capped mountains in the distance under a clear blue sky.

UPDATED OUR
Strategic Plan
**TO MORE
EFFECTIVELY ADVANCE
CONSERVATION**



CELEBRATING

25 *Years*

**OF INNOVATIVE RESEARCH,
ENGAGED COMMUNITIES, AND
HEALTHY LANDSCAPES**

MESSAGE FROM THE *Executive Director*

IT'S BEEN A BIG YEAR FOR MIISTAKIS! IT'S BEEN A YEAR OF HARD WORK AND TRANSITION – BUT WITH HARD WORK COMES RESULTS AND GROWTH.

In addition to the 26 different conservation projects Miistakis worked on over the past year addressing biodiversity, ecological connectivity and ecosystem-based climate adaptation we experienced some significant highlights as an organization:



★ **MIISTAKIS WAS HONOURED TO BE AWARDED THE 2022 CITY OF CALGARY ENVIRONMENTAL ACHIEVEMENT AWARD.**

This award recognizes leadership, innovation, and action in environmental stewardship that reduces the impact on Calgary's natural environment.

★ **WE MOVED! MIISTAKIS IS NOW A COLLABORATOR IN MOUNT ROYAL UNIVERSITY'S TRICO CHANGEMAKERS STUDIO.**

The Studio is a learning space dedicated to social innovation and collaboration at the intersection of campus and community. With its systems approach to complex problems it's a perfect match for Miistakis, and we look forward to being part of this community hub of changemaking.

★ **MIISTAKIS HAS SPENT THE PAST YEAR LEARNING HOW TO BE AN INDIGENOUS ALLY.**

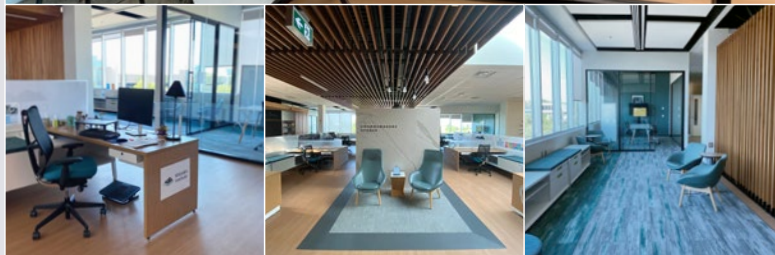
We have worked with Elliot Fox as Indigenous Conservation Consultant. Elliot has served as an invaluable guide as we explore how Miistakis can better serve and support Indigenous-led conservation. Elliot's work has informed our Indigenous engagement and supported our Indigenous relationships including a new collaboration with the Blood Tribe Land Management to enhance coexistence with beavers and enhance watershed resiliency.

★ **WE HAVE UPDATED OUR STRATEGIC PLAN TO BETTER GUIDE HOW MIISTAKIS CAN EFFECTIVELY ADVANCE CONSERVATION.**

We have re-defined our research focus areas and laid a path that will guide our conservation efforts. I would like to thank our Board of Directors for their work in advancing this strategic direction.

★ **MIISTAKIS CELEBRATES OUR 25TH ANNIVERSARY THIS YEAR!!!**

We look forward to celebrating this significant milestone with all of you at a gathering later this fall. We look forward to seeing you all there.



We are proud of our work over the past year and we are happy to share some of our research and outreach highlights in this report. **A big thanks to all of our supporters and partners - collaboration is key to our approach to conservation** as conservation is complex and requires engagement of a diversity of perspectives and stakeholders and a multitude of approaches to realize conservation success and our work at Miistakis reflects that complexity and diversity.

Danah Duke
Executive Director

About Us

THE MIISTAKIS INSTITUTE IS A REGISTERED CHARITY THAT UNDERTAKES APPLIED CONSERVATION RESEARCH TO ENABLE RESPONSIBLE AND SUSTAINABLE DECISIONS TO SUPPORT BIODIVERSITY, ECOLOGICAL CONNECTIVITY AND NATURE-BASED CLIMATE ADAPTATION.



Miistakis is a Blackfoot word that translates to 'backbone of the world'. When Miistakis was first formed in 1997, the work of the institute focused on the Crown of the Continent ecosystem. The Crown of the Continent is a geographical area centered on the Waterton-Glacier International Peace Park and stretches along the axis of the Rocky Mountains spanning southwest Alberta, southeast British Columbia and northern Montana, a place known to the Blackfoot people as the backbone of the world.

In its early years Miistakis developed a specialized expertise in GIS data and transboundary spatial analysis, and this skill set remains. In addition to focusing on spatial analysis, Miistakis has expanded our breadth of research expertise to include:

- research design
- spatial analysis and modeling
- facilitation
- on-line mapping and tool development
- citizen science
- database design and management
- policy research and analysis
- community engagement
- knowledge mobilization

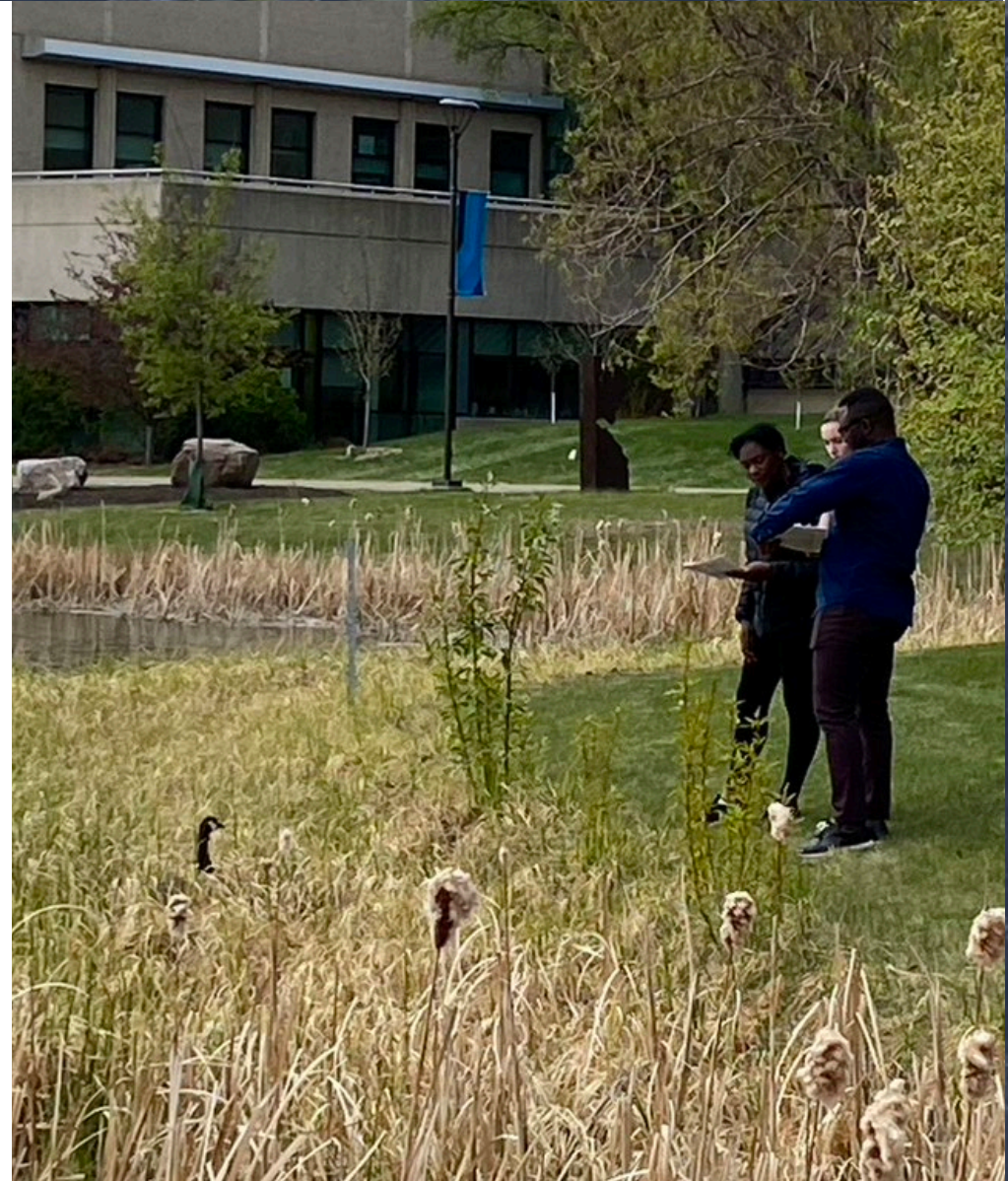
Vision & Mission

VISION

A world where communities have genuine access to the science and research they need to make choices that promote healthy landscapes.

MISSION

The Miistakis Institute brings people and ideas together to promote healthy communities and landscapes. We study the landscape, so we can help people maintain it; and we work to make innovative research accessible to communities and decision-makers.

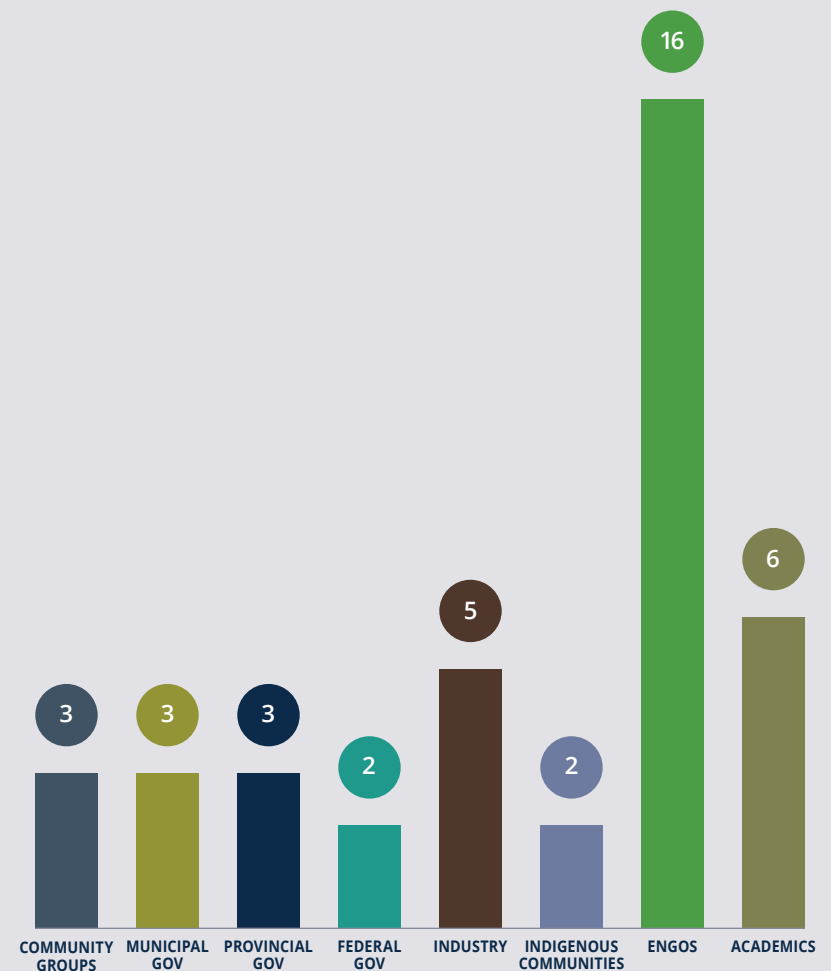


OUR COMMUNITY – *Who We Serve*

MIISTAKIS WORKS COLLABORATIVELY WITH ALL SECTORS, DEVELOPING OUR RESEARCH IN PARTNERSHIP WITH END KNOWLEDGE USERS.

In 2021/2022 we worked with over **40 partners**, including federal, provincial and municipal governments, industry, Indigenous communities, private landowners, ENGO's, academics, and community groups.

OUR PARTNERS ACROSS VARIOUS SECTORS



Mount Royal University

MIISTAKIS IS AN AFFILIATED INSTITUTE WITH MOUNT ROYAL UNIVERSITY.

The objective of the affiliation is to facilitate collaboration and cooperation between the Institute and Institute researchers and the University and University researchers in mutually beneficial activities, including, but not limited to applied environmental research, spatial and environmental analysis, environmental management, related social-ecological practice and analysis.

MRU prides itself with supporting research and scholarship that addresses problems of concern in local and regional communities and promotes research with and not simply in these communities. Miistakis takes an interdisciplinary approach to all of our research and we are able to enhance student exposure to interdisciplinary research through student internships, student mentorship and student volunteer opportunities. We are able to provide integrated work learning experiences by providing employment opportunities, both short and longer term, for students across campus. Most directly, Miistakis provides opportunities for students to enrich their academic experience through participation in applied research projects. While adapting to offering remote opportunities to students, this year we were able to offer full time summer employment to two students. Their experience included field work along the Trans Canada Highway to ground truth fence locations for our PronghornXing project, to conduct literature reviews, and to analyze a 3-year dataset on the use of parks by off leash dogs.





OUR
Research

ECOLOGICAL *Connectivity*

ECOLOGICAL CONNECTIVITY, THE UNIMPEDED MOVEMENT OF SPECIES AND THE FLOW OF NATURAL PROCESSES, IS ESSENTIAL TO HEALTHY LANDSCAPES.

World-wide, ecological connectivity is increasingly fragmented and degraded by human infrastructure and activity, which can reduce or prevent the ability of wildlife to move freely through the landscape, risking localized extinction and population level health impacts. Further, humans rely on ecological connectivity to maintain natural processes that provide services such as clean air, clean water, and ability to adapt to a changing climate.

Over the past year, Miistakis has focused on identifying areas important for ecological connectivity, supporting the maintenance and restoration of connected landscapes and promoting the importance of ecological connectivity.

Highlights of our work in 2021/22 included:

- Advanced connectivity for pronghorn through the identification of priority mitigation sites
- Advanced the consideration for connectivity in municipal planning through implementation of the Connectivity Risk Assessment tool
- Improved understanding of connectivity through continued monitoring of wildlife in important wildlife corridors (Crowsnest Pass, City of Calgary)
- Worked, in partnership with Fiera Biological Consulting Inc. on the development of important datasets to support the prioritization of wetlands and wetland corridors for conservation and restoration to ecological connectivity

Biodiversity

BIODIVERSITY, OR BIOLOGICAL DIVERSITY, REFERS TO THE NUMBER, VARIETY, AND VARIABILITY OF LIVING ORGANISMS IN AN AREA.

A biodiverse landscape reflects a healthy ecosystem that supports natural processes human rely on such as food production, clean water, medicine, and clean air. Human activities, such as changes in land use (e.g. urbanization), over-exploitation, climate change, and pollution, cause alarming rates of biodiversity loss globally, reduce the ability of ecosystems to function properly, and impact economic, recreational, cultural and scientific opportunities.

Over the past year, Miistakis has focused on enhancing our understanding of biodiversity, supporting the maintenance and restoration of biodiversity and promoting the importance of biodiversity.

Highlights of our 2021/22 research:

- Monitored biodiversity in the City of Calgary using remote cameras and citizen science to inform City of Calgary management
- Demonstrated Alberta private land conservation contributions to biodiversity
- Supported biodiversity monitoring at industrial sites
- Provided support to redesign the Alberta Volunteer Steward Program to enhance environmental monitoring and identify opportunities for citizen science approaches
- Initiated a three-year research initiative in partnership with the City of Calgary to improve urban wetland management and enhance urban wetland health

ECOSYSTEM-BASED *Climate Adaptation*

MIISTAKIS PRIORITIZES ECOSYSTEM-BASED CLIMATE ADAPTATION AS A STRATEGY TO MAINTAIN RESILIENT, HEALTHY LANDSCAPES IN THE FACE OF A CHANGING CLIMATE.

Ecosystem-based climate adaptation refers to a variety of approaches that involve the conservation, sustainable management, and restoration of ecosystems, and is aimed at reducing the vulnerability of humans to climate change hazards. Examples of approaches include habitat restoration, wetland management, and sustainable forest management practices.

Our work over the past year focused on informing the conservation and restoration of natural landscapes and systems and promote nature conservation to enhance ecosystem-based adaptation.

Our research this past year included:

- Working on the development of regional wetland datasets for the Bow River Basin to support municipal planning and wetland management, protection and restoration
- Created tools to support municipalities and communities in identifying and promoting their natural infrastructure
- Promoted coexistence with beavers to realize watershed benefits
- Supported the private land conservation community by designing and building a database to track privately conserved land in Alberta

Outreach

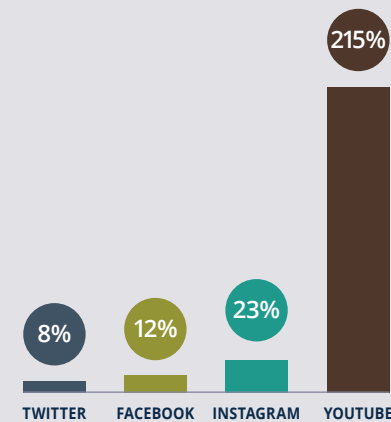
MIISTAKIS TAKE A DIVERSE APPROACH TO OUR OUTREACH AND EXTENSION.

We focus our efforts on creating communication products that will support end-users in conservation decision-making – this means our research includes peer-reviewed publications, reports, infographics, presentations, newsletters and social media.

Highlights over the past year include:

- 50,665 resource downloads – demonstrating the impact our freely available on-line resources have – this represents a 15% annual increase
- 17 presentations to over 900 people
- 29 media mentions
- >23,000 Miistakis YouTube channel video views

GROWTH ACROSS ALL SOCIAL MEDIA CHANNELS



3 NEW PEER-REVIEWED PUBLICATIONS



How Can We Do Citizen Science Better? A Case Study Evaluating Grizzly Bear Citizen Science Using Principles of Good Practice in Alberta, Canada

A Framework to Identify Priority Wetland Habitats and Movement Corridors for Urban Amphibian Conservation

Advancing Amphibian Conservation through Citizen Science in Urban Municipalities

BOARD OF DIRECTORS

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Holly Kinas
CONSERVATION ANALYST

Elliot Fox
INDIGENOUS CONSERVATION CONSULTANT



OUR
Financials

STATEMENT OF FINANCIAL POSITION

FOR THE YEAR ENDED MARCH 31

	2022	2021
Assets		
Current		
Cash	\$ 54,083	\$ 278,988
Accounts receivable	153,296	54,246
Accrued project receivables	15,545	69,774
Goods and services tax recoverable	1,245	1,605
Prepaid expenses	4,833	4,375
	229,002	408,988
Investments (Note 2)	449,284	420,607
Equipment (Note 3)	12,425	17,497
	\$ 690,711	\$ 847,092
Liabilities and Net Assets		
Current		
Accounts payable and accrued liabilities	\$ 24,485	\$ 22,694
Wages payable	24,495	26,817
Deferred contributions related to operations (Note 4)	87,187	236,300
	136,167	285,811
Deferred contribution related to equipment (Note 5)	521	692
	136,688	286,503
Net assets		
Invested in equipment	11,904	16,805
Internally restricted (Note 6)	380,000	380,000
Unrestricted	162,119	163,784
	554,023	560,589
	\$ 690,711	\$ 847,092

STATEMENT OF OPERATIONS

FOR THE YEAR ENDED MARCH 31

	2022	2021
Revenue		
Services	\$ 308,985	\$ 39,118
Foundation and other grants	284,788	407,749
Government grants	266,023	378,261
Donations	31,338	32,677
Endowment income (Note 7)	3,387	-
Temporary wage subsidy (Note 9)	-	8,250
Interest and other income	-	402
	\$ 894,521	\$ 866,457
Expenditures		
Wages and benefits	\$ 455,095	\$ 606,888
Subcontract	399,539	184,217
Professional fees	33,628	37,585
Rent	10,775	-
Software	8,236	5,803
Supplies	7,601	10,189
Amortization	5,072	5,021
Insurance	4,906	6,879
Travel	4,786	5,573
Internet and web domain	2,226	6,277
Telephone and utilities	1,587	3,653
Training	1,539	863
Workshop	1,309	467
Advertising and promotion	137	991
Interest and bank charges	6	203
	\$ 936,442	\$ 874,609
Deficiency of revenue over expenditures before undernoted items	\$ (41,921)	\$ (8,152)
Other income		
Unrealized gain on investment	8,814	41,937
Gain on investments	16,645	12,271
Dividend income	9,896	8,194
	\$ 35,355	\$ 62,402
Excess (deficiency) of revenue over expenditures for the year	\$ (6,566)	\$ 54,250

STATEMENT OF CHANGES IN NET ASSETS

FOR THE YEAR ENDED MARCH 31

	Invested in equipment	Internally restricted	Unrestricted	Total 2022	Total 2021
Balance, beginning of year	\$ 16,805	\$ 380,000	\$ 163,784	\$ 560,589	\$ 506,339
Excess (deficiency) of revenue over expenditures for the year	(4,901)	-	(1,665)	(6,566)	54,250
Balance, end of year	\$ 11,904	\$ 380,000	\$ 162,119	\$ 554,023	\$ 560,589

INNOVATIVE RESEARCH. ENGAGED COMMUNITIES. HEALTHY LANDSCAPES.



**Miistakis
Institute**

www.rockies.ca

