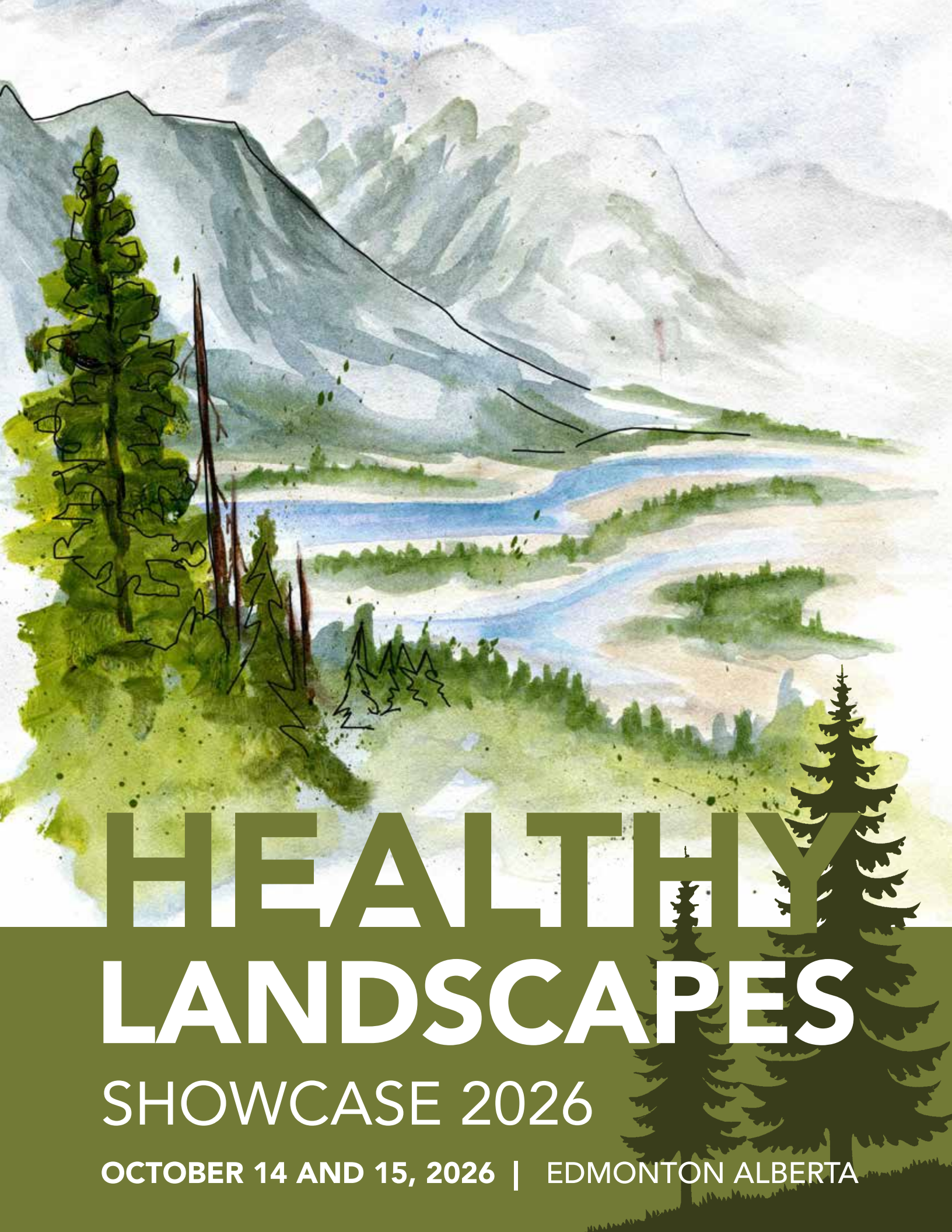




HEALTHY LANDSCAPES

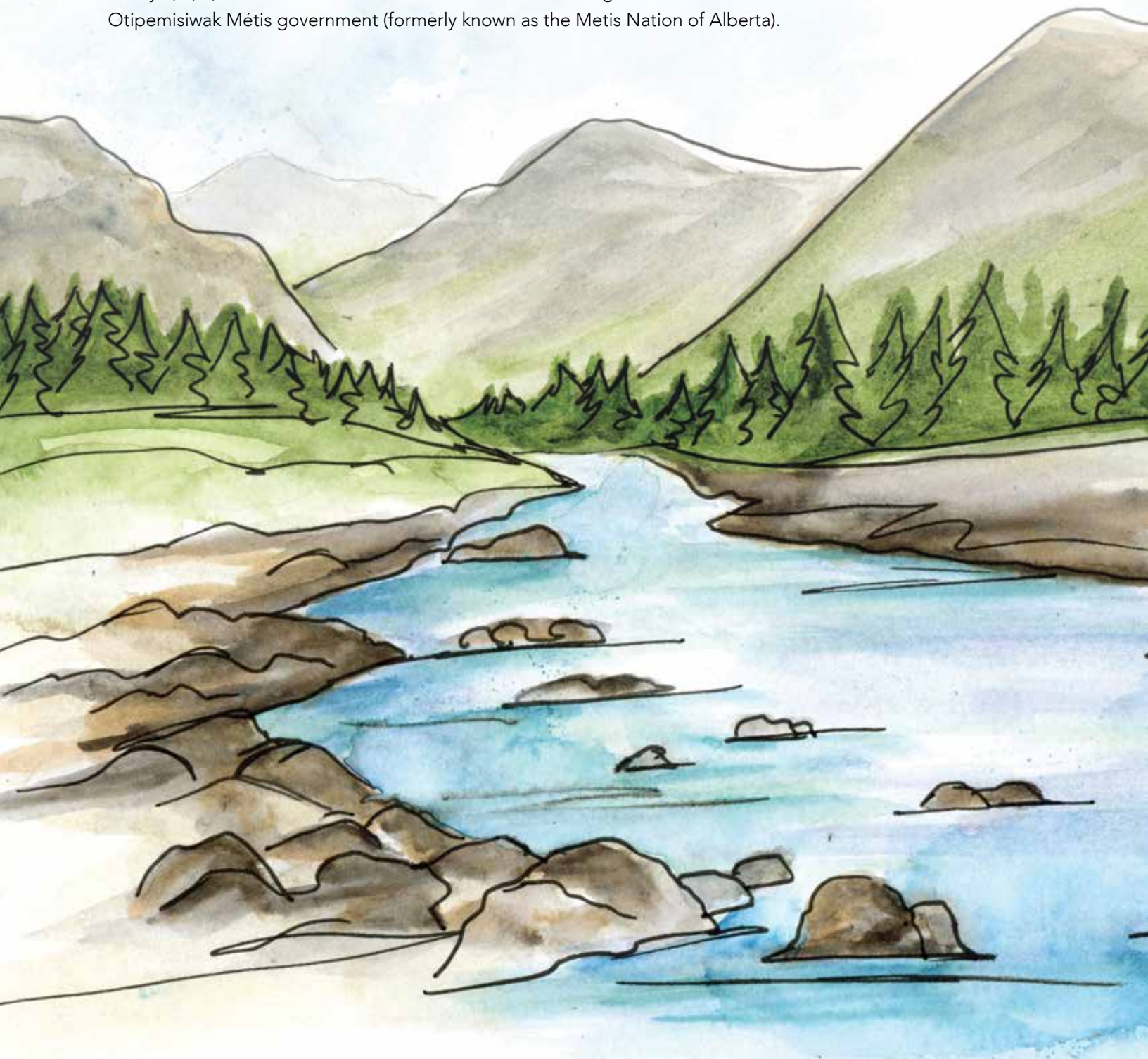
SHOWCASE 2026

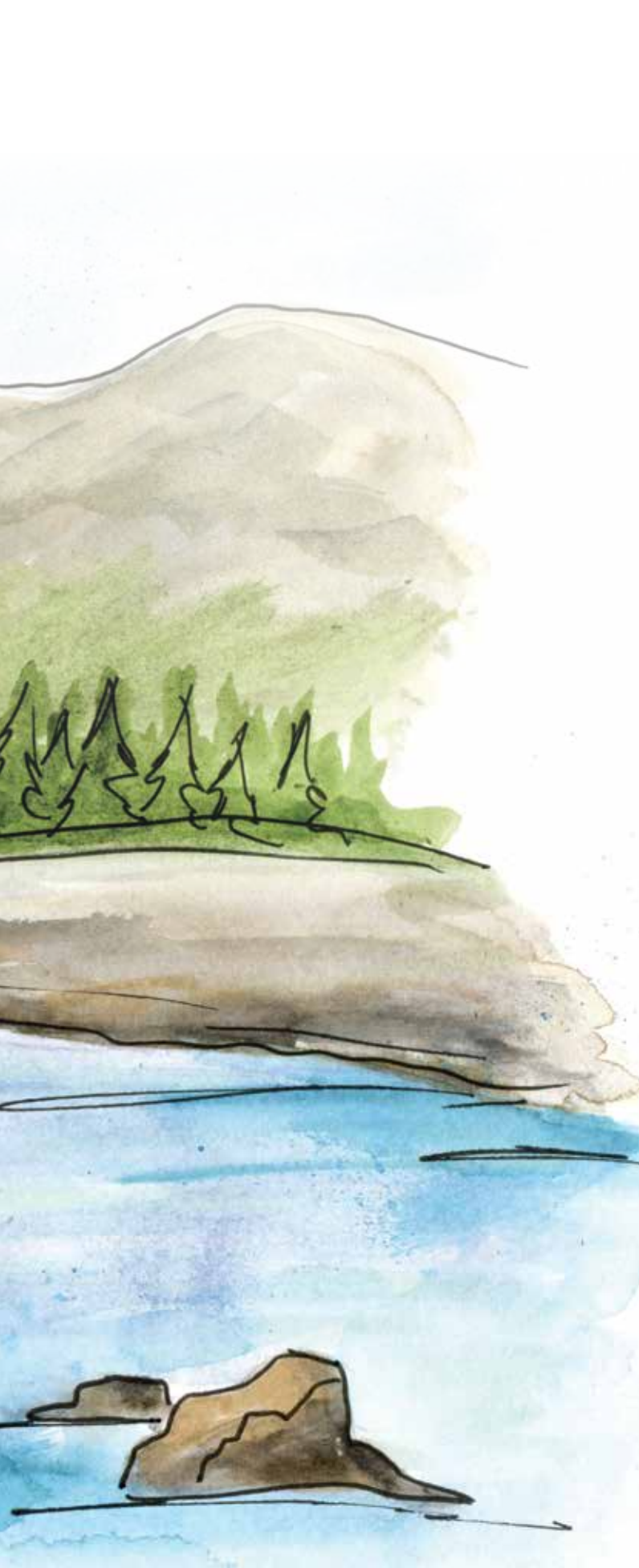
OCTOBER 14 AND 15, 2026 | EDMONTON ALBERTA

INDIGENOUS LAND ACKNOWLEDGEMENT

We would like to acknowledge that we are gathered on the traditional territory of many Indigenous communities and peoples, who have lived with and managed this land, its forests and its wildlife since time immemorial.

This land is now referred to as Treaty 6 territory or the ancestral homeland of the Metis, specifically the Fort Edmonton Metis District. However, our member companies operate on the traditional territories of Treaty 6, 7, 8, 4 and 10 and the ancestral homeland of the eight Metis Settlements and the Otipemisiwak Métis government (formerly known as the Metis Nation of Alberta).



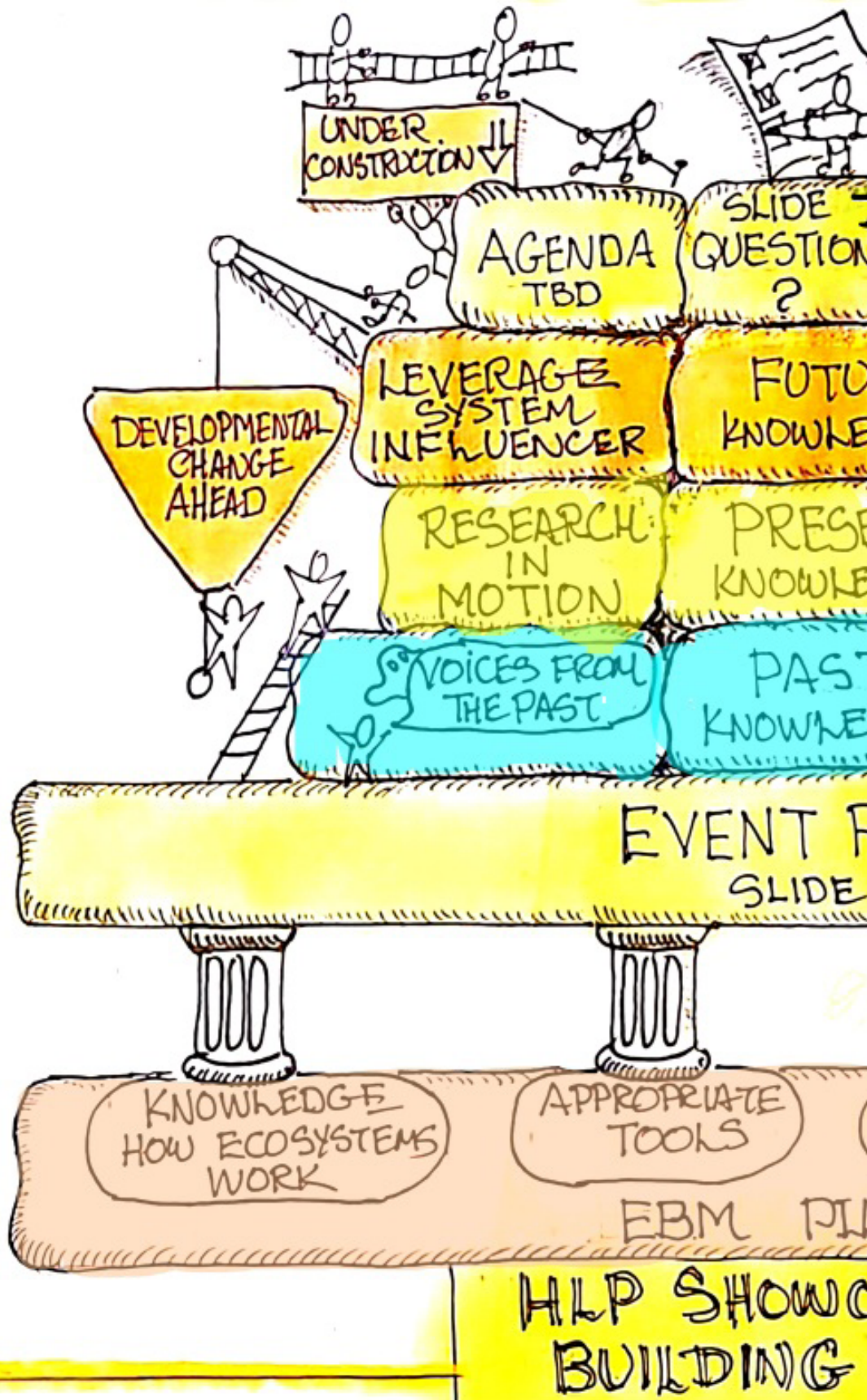


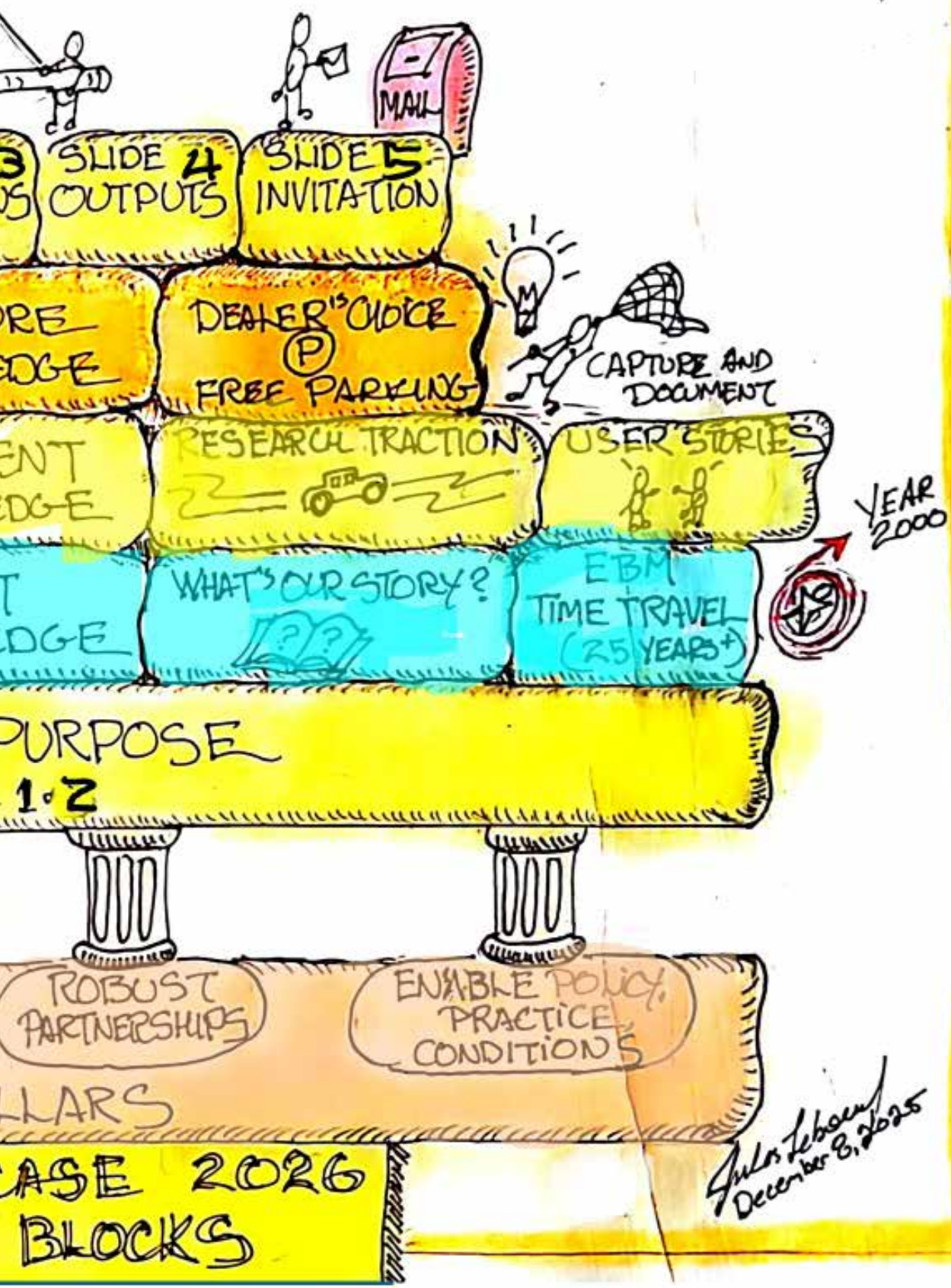
ACKNOWLEDGMENTS

This event would not be possible without the collaboration, innovation, and efforts of several people, including:

- Dr. David Andison, Program Lead of Healthy Landscapes Program
- Jen Allen-Dickman, Project Coordinator, Fuse Consulting Ltd.
- Nicole Galambos, Alberta Forest Products Association
- Fran Hanington, Communications Assistant, fRI Research
- Jules LeBeouf, Independent Contractor
- Sonya Odsen, Senior Science Communicator, Fuse Consulting Ltd.
- Shelagh Pyper, Principal, Fuse Consulting Ltd.
- Ben Williamson, Communications Lead at fRI Research
- We acknowledge the entire HLP Activity Team for their dedication and commitment to, and funding of the HLP over the last 25+ years.
- We are grateful for having Penny Snell, BubbleUp Marketing on our team. Penny was able to take research material (sometimes boring) and make it exciting and meaningful through her artistic expressions (a picture is worth a thousand words).
- We thank Alberta Pacific Forest Industries, Mercer Peace River Pulp, West Fraser Mills, and Weyerhaeuser for sponsoring the showcase through FRIAA (Forest Resource Improvement Association of Alberta (FRIAA)). We also thank fRI Research for supporting us in creating this event.







HEALTHY LANDSCAPES PROGRAM (HLP) SHOWCASE AGENDA

October 14-15, 2026 | Chateau Lacombe, 10111 Bellamy Hill | Edmonton, Alberta

Breakfast & lunch provided

Purpose Statement

- 1) To engage in a retrospective of HLP research and learning outputs relevant to forest resource management today.
- 2) Hosting a gathering of EBM practitioners to facilitate connection as a community of learners, share knowledge and experiences in applying EBM on the landscape at land use, FMP, and operational scales.
- 3) Share stories of integration of NRV knowledge across planning scales and jurisdictions.
- 4) In looking back to look forward, we may see what is possible for future work of HLP.

Time	Day One: The 'E' Part of EBM	Speaker
7:30	COFFEE & HOT BREAKFAST	
8:30	Opening Introductions	
8:55	Welcome from fRI	Rick Blackwood – fRI Research
9:00	Keynote Transitioning to EBM Beyond the Western Boreal HLP History and EBM	Kate Lindsay – Forest Products Association (FPAC) David Andison – Bandaloop / fRI Research
9:40	Making the NRV Connection: 1. Defining Fire Regimes of the Western Boreal 2. Using TEK to help define regimes	David Andison Sonja Leverkus - Shifting Mosaics
10:00	REFRESHMENT BREAK	
HLP Research Knowledge Presentations and Panel Discussions		
10:30	Theme #1: Strategic Planning Level – Landscape Scale 1. Modelling Ecosystem Conditions Using the LandWeb Model 2. Main LandWeb Output Messages 3. Interpreting LandWeb Output: Diving Deeper DAVE TALK #3 - MAYBE 4. Why Whole Landscapes are Important Panel Discussion: Land Use Planning and FMP Implications	Alex Chubaty – FOR-CAST David Andison TBD Kylie McLeod – Ducks Unlimited Canada

11:30	Theme #2 Operational Planning Level – Meso-Scale 1. Disturbance Patterns at Meso-Scales: New Knowledge, New Tools 2. Aggregated Harvesting: Lessons Learned from Phase I 3. Aggregated Harvesting Lessons Learned from Phase II	David Andison Logan Purdy – Forcorp Solutions Sarah Namiiro - Forcorp
12:00	LUNCH (provided)	
1:00	Theme #2 Operational Planning Level – Meso-Scale – continued 5. Implementing a Where-WYN Strategy in Central BC Panel Discussion: Land Use Planning and FMP Implications	Hans Erasmus – BC MoF
1:30	Theme #3 Tactical Planning Level – Disturbance Events 1. What is an Event and What Do They Look Like? 2. Wildfire Event Overview 3. Wildfire vs. Human Events in the Western Boreal 4. Post-Disturbance Stand-Type Shifts 5. Stand-Replacing vs Stand-Maintaining Fires Panel Discussion: Planning Implications at all Levels	David Andison Libby Taylor-Manning – UBC Forestry Paul Pickell – UBC Forestry Natalie MacMillan – UBC Forestry Cameron Naficy – Oregon State University
3:00	REFRESHMENT BREAK	
3:30	Open Speakers Table & Networking	
4:30	Reception with cash bar and hot/cold appetizers	Sponsored by Bandaloop Landscape-Ecosystem Services Ltd.

SPEAKERS DAY 1

Keynote



Transitioning to EBM Beyond the Western Boreal

Kate Lindsay, Senior Vice President and Chief Sustainability Officer, Forest Products Association of Canada (FPAC)

Bio

Kate Lindsay works in sustainability, conservation, and policy development.

She has spent 25 years working in the fields of forestry, climate change mitigation and adaptation, biodiversity conservation and international trade. She has held roles with the forest industry, federal, provincial and municipal governments, as well as being the principal at an environmental consulting firm.

Kate is responsible for working with FPAC members, partners, and governments to advance environmental and climate leadership files, as well as evidence-based federal policy. Kate is a member of the National Nature Advisory Committee, the National Adaptation Strategy (NAS) Strong and Resilient Economies Roundtable, the FireSmart Canada Advisory Committee as well as a Board member of the wildfire resilience center of excellence-Wildfire Resilience Consortium of Canada (WRCC). Kate is also a Registered Professional Biologist in BC, mother of two and active volunteer in community youth sports.



Healthy Landscapes Program and EBM

Dr. David Anderson, Principal, Bandaloop Landscape-Ecosystem Services, and Healthy Landscapes Program Lead, fRI Research

Bio

Dr. David Anderson began his Forestry career with the Ontario government after

completing his BSc in Forestry. After eight years David moved out to Vancouver to pursue his PhD in Landscape Ecology. Dr. Anderson began his consulting career soon thereafter specializing in exploring and developing EBM (Ecosystem-Based Management) tools and knowledge. His research focuses largely on fire history, and his other interests include simulation modelling, biodiversity monitoring, developing decision-support tools. He is currently the architect and Program Lead for the Healthy Landscapes Program at fRI Research, although his other work takes him to BC, Saskatchewan, NWT, Manitoba, Ontario and Nova Scotia. David is an Adjunct Professor at UBC Forestry and U of A working with a wide range of academics.

Abstract

Dave will provide a brief history of the Healthy Landscapes Program. Its roots actually began in 1995 as the Natural Disturbance Program as part of the Foothills Model Forest. As the name suggests, the Program started with a focus on generating NRV (Natural Range of Variation) knowledge through empirical research and modelling for the first 15 years. The Program evolved into what is now the Healthy Landscapes Program which largely represents a shift towards a more specific focus on the broader concept of Ecosystem Based Management, or EBM. Also included will be a clear definition of how the HLP defines EBM, and how it uses that to structure its various components, and how that definition also structures the flow of this Showcase.

Defining Fire Regimes of the Western Boreal

Dr. David Anderson, Principal, Bandaloop Landscape-Ecosystem Services, and Healthy Landscapes Program Lead, fRI Research

(Bio and Photo on page 10)

Abstract

Understanding past and present disturbance regimes are a critical cornerstone of EBM. Disturbance regimes not only provide direct and specific guides to forest management activities in the form frequency, size, and severity of disturbances (among other attributes) but they are also invaluable input into models that generate possible past and future range of variation for landscape attributes such as old forest levels, edge density, and interior forest.



Using TEK to Help Define Regimes

Dr. Sonja Leverkus, Founder, Shifting Mosaics Corporation and Northern Fire WoRx Corporation

Bio

Dr. Sonja Leverkus is the founder of Shifting Mosaics Corporation and Northern Fire WoRx Corporation. Her PhD specialized in

landscape ecology and prescribed fire. She is an RPBio, RPF, PAG, EP, and is a Burn Boss. She is an adjunct professor at numerous universities and member of the Wildfire Analytics Lab at the University of Alberta. The experiences of both safely lighting prescribed fire during burn bans combined with fighting wildfire in severe drought allows Dr. Leverkus the opportunity to observe and adapt to numerous impacts in the pyrocene. Her passion for the land and all its inhabitants drives her to provide ecologically and culturally appropriate natural resource management opportunities for all those she and her teams work with.

SPEAKERS DAY 1



Modelling Ecosystem Conditions Using the LandWeb Model

Alex M. Chubaty, FOR-CAST Research & Analytics, <<https://for-cast.ca>>

Bio

Dr. Chubaty is an ecologist and simulation modeller who builds spatial models of forest landscapes and the species that

live in them. He completed his PhD at Simon Fraser University, followed by postdoctoral research at Université Laval and Natural Resources Canada. He runs FOR-CAST Research & Analytics in Calgary, Canada. His recent work includes forest landscape simulation studies (including LandWeb), landscape connectivity modelling, and analyses of insect outbreak dynamics, to inform land management and species-at-risk decisions. He writes open-source R packages for this work and co-developed the 'SpaDES' simulation platform. He advocates for open data and reproducible workflows.

Abstract

LandWeb is a landscape simulation model that simulates the natural range of variation (NRV) in forest conditions across the western Canadian boreal forest. It couples forest succession with a wildfire model driven by long-term historic fire cycles, and simulates each landscape over centuries, in many replicate runs. The result is a distribution of plausible pre-industrial landscapes to compare with today's forest. The first talk introduces version 3 of the model: the question it answers, how vegetation and fire interact in the simulation, the data it draws on, and the study areas it covers, from British Columbia to Manitoba. The second talk shows how to read the outputs. Results are summarized for reporting areas such as forest management areas, ecoregions and caribou ranges, and for their overlaps. I walk through sample outputs and discuss what the simulated ranges can and cannot tell forest managers.

Main LandWeb Output Messages

Dr. David Andison, Principal, Bandaloop Landscape-Ecosystem Services, and Healthy Landscapes Program Lead, fRI Research

(Bio and photo on page 10)

Abstract

Modelling is the only way to generate NRV (Natural Range of Variation) for landscape scale attributes such as seral stage levels, interior forest, and old forest patch sizes. The HLP has used two different, but technically similar models to generate landscape scale NRV: Landmine and LandWeb. This talk will offer an overview of some of the model output, and what new understanding of landscape dynamics - and new questions - it has generated.

Interpreting LandWeb Output Diving Deeper

TBD



A Whole Landscape Approach to Ecosystem Based Management

Kylie McLeod, Head, Boreal Conservation Program, Ducks Unlimited Canada's National Boreal Program

Bio

Kylie McLeod is Head of Boreal Conservation Programs with Ducks Unlimited Canada's National Boreal Program and is based in Kamloops, British Columbia. With more than a decade of experience in wetland conservation across Canada's western boreal region, she works with diverse partners to translate science into practical conservation solutions. Kylie leads initiatives that connect practitioners, land managers, and decision-makers with the latest wetland and waterfowl science through applied research, training, field resources, and knowledge-sharing programs. Her work advances the conservation, restoration, and sustainable management of boreal wetlands while supporting informed decision-making across the landscape.



SPEAKERS DAY 1

Abstract

The Healthy Landscapes Program (HLP) has traditionally focused on understanding natural landscape patterns and change across forested landscapes, with much of its work shaped by the needs of the forest management sector. As awareness grows about the connections between forests, wetlands, water, wildlife, and other parts of the landscape, there is increasing interest in broadening this focus. This shift also reflects the need to address complex challenges such as climate change and biodiversity loss through more inclusive, ecosystem-wide approaches. The Whole Landscape Approach to Ecosystem-Based Management project was developed to support this transition. The project had two main objectives: (1) create a practical definition and classification of a “whole landscape” for use by the HLP, and (2) review current knowledge on wetlands and identify key knowledge gaps, partnership opportunities, and future project priorities that could strengthen ecosystem-based management across the boreal landscape. The results of this project can inform the integration of wetlands into future ecosystem-based management projects.

Disturbance Patterns at Meso-Scales: Does it Matter?

Dr. David Andison, Principal, Bandaloop Landscape-Ecosystem Services, and Healthy Landscapes Program Lead, fRI Research

(Bio and photo on page 10)

Abstract

This theme introduces a new time-space scale of NRV understanding and management planning. In this introduction, new research will be shared on the calculation and development of a series of new NRV indicators that capture critical landscape patterns that until now have not been captured. The new research reveals that wildfire activity over one or more decades, and 10's of thousands of hectares clusters. We also found that this contrasts sharply with past harvesting and other human disturbance activity which tends to spread disturbance out evenly over space. A management planning solution in the form of a combination of intermediate or “meso” scaled aggregated harvesting zones with a similar number of temporal no-go zones is discussed.



Exploring the Implementation of Aggregated Harvest in Woodland Caribou Ranges.

Logan Purdy, Forcorp Solutions

Bio

Logan Purdy, MSc, MF, RPF, is a Resource Analyst with Forcorp Solutions Inc. He specializes in forest management planning,

timber supply and spatial analysis, growth and yield, and caribou habitat and restoration planning. Since joining Forcorp in 2018, Logan has supported many forest management plans across Alberta, and led GIS and planning work for seismic-line restoration projects in several woodland caribou ranges.

Abstract

This study used 100-year timber supply modelling to evaluate harvest aggregation, access constraints and harvest timing across three Alberta caribou planning areas. Larger, aggregated patches reduced the disturbance footprint but also reduced harvest volume. The feasibility and effectiveness of aggregation depended strongly on landscape configuration: contiguous operable landbases provided greater flexibility to create large patches, while fragmented landbases increased the importance of access management. Overall, aggregation can improve caribou habitat outcomes but does not eliminate trade-offs with harvest volume.

Aggregated Harvesting: Lessons Learned from Phase II

Sarah Namiro, Forcorp Solutions

Bio

I'm a Resource Analyst with Forcorp Solutions, FIT, and an alumnus of the University of Alberta (Master of Science in Forest Biology and Management). I have experience with timber supply analysis, caribou range planning, restoration planning among other areas of resource analysis. I'm particularly interested in advancing in programming and modelling techniques, advancing science research application in forest and natural resource management. Outside of work, I enjoy cycling, music, plants, and hanging out with my cat.

Abstract

Aggregated Harvesting Lessons Learned from Phase II - building on the work and metrics used in Phase I, we explore the effects of zonation; relaxing modelling constraints and parameters, including evenflow, merchantability limits, and ECA; and landscape differences across Alberta subregions, particularly the Upper Foothills, Central Mixedwood, and Lower Boreal Highlands.

SPEAKERS DAY 1



Implementing a Where-WYN Strategy in Central BC

Hans Erasmus, Land and Resource Specialist, BC Ministry of Forests

Bio

Hans Erasmus is a Land and Resource Specialist with the BC Ministry of Forests whose work focuses on wildfire resilience,

ecological sustainability, and landscape-scale forest management. Over the past decade, he has worked in wildfire operations, wildfire risk reduction planning, collaborative stewardship, and forest landscape planning across northern British Columbia. Hans played a key role in advancing the Lakes Resiliency Project and incorporating wildfire resilience objectives into the Lakes Forest Landscape Plan, including the development of Focused Harvest Areas and Interim Recovery Areas. His work emphasizes applying science, policy, and collaboration to develop practical, implementable forest management strategies.

Abstract

The Lakes Forest Landscape Plan (FLP) pilot in northern British Columbia provides a practical example of how ecosystem-based management concepts can be translated into operational planning and legal direction. This presentation will highlight two key components of the Lakes FLP. First, it will describe the development and implementation of a Where-WYN strategy, expressed through Focused Harvest Areas and Interim Recovery Areas, to concentrate harvesting disturbance in space and time while supporting landscape recovery. Second, it will demonstrate how natural range of variation (NRV) research and historical fire-regime information were integrated into planning to inform old-forest targets, harvest-pattern objectives, stand-retention approaches, and disturbance design. Together, these strategies illustrate how HLP research can be applied across multiple planning scales to support biodiversity conservation, wildfire resilience, and sustainable forest management while maintaining operational flexibility.

What is an Event and Why Does it Look Like?

Dr. David Andison, Principal, Bandaloop Landscape-Ecosystem Services, and Healthy Landscapes Program Lead, fRI Research

(Bio and photo on page 10)

Abstract

At the finest scales, wildfire burning patterns reveal a unique type and scale of variation. In fact, to properly capture this, the HLP developed a new pattern language to define “disturbance events” in more appropriate ways – that capture both partial mortality, different types and sizes of fire remnants, and patchiness from fire skips. The NRV data for these various fire event patterns was generated by 129 wildfires across Alberta and Saskatchewan that had no evidence of pre or post fire human activity. An overview of the new spatial language, and what we have learned from it will be summarized.

Wildfire Event Overview

Libby Taylor-Manning, UBC Forestry



Wildfire vs. Human Events in the Western Boreal

Paul D. Pickell, Faculty of Forestry, UBC

Bio

Dr. Paul Pickell is an Associate Professor of Teaching at the University of British Columbia where he teaches GIS and remote sensing.

His current research focuses on educational competency assessment using natural language processing and large language models. Additionally, he manages the geospatial data infrastructure for the Faculty of Forestry and Environmental Stewardship, which enables teaching and research with UBC's geospatial data resources, including resources at UBC's two research forests and partner organizations. He has authored numerous publications on advanced geospatial analysis in peer-reviewed publications including a textbook, *Geomatics for Environmental Management: An Open Textbook for Students and Practitioners*, and he is also an academic editor for the journal *PLOS ONE*.



SPEAKERS DAY 1

Abstract

Boreal forests are increasingly shaped by anthropogenic disturbance regimes from forestry and energy development, which suppress natural disturbances such as fire and erode the ecological memory that sustains forest integrity. This research characterizes how the spatial patterns of anthropogenic disturbance differ from those of the wildfire at the event and landscape scales. At the event scale, harvesting and energy development disturbances mapped across industrialized landscapes of Alberta, Canada (1949–2012) were compared with unsuppressed fires sampled across Alberta and Saskatchewan. Anthropogenic disturbances exceeded the historical range of variability in disturbed area, largest patch size, and undisturbed forest remnants. Energy development was a major driver of these departures: following its intensification, remnant forest within disturbances declined and edge density increased. At the landscape scale, a 1985–2010 satellite time series of the Alberta Foothills distinguished resource extraction from fire with 94% overall accuracy, showing that anthropogenic disturbance accounted for 86% of annual forest disturbance. A national time series pattern analysis further showed that managed boreal forests were associated with rising edge density and declining core forest cover and largest forest patch size, whereas forests with low disturbance rates retained inherent pattern variability. These findings provide new approaches for detecting and characterizing anthropogenic disturbance patterns and point to the need for landscape structure thresholds and transition indicators to guide boreal forest management.



Post-Disturbance Stand-Type Shifts

Natalie MacMillan, Research Technician, Centre for Wildfire Coexistence, UBC

Bio

Nat is a research technician with the Centre for Wildfire Coexistence at the University of British Columbia (UBC). She holds a MSc in Forestry from UBC and a BSc in Ecosystem

Management & Forestry from the University of California, Berkeley. Nat has worked in fire ecology research across a variety of ecosystems in western North America. She draws on this breadth of experience to consider what can be learned from forest management in different contexts and how these lessons can be applied across diverse forest ecosystems.

Abstract

Wildfire is the dominant natural disturbance in Canadian boreal forests, which drives stand succession, composition, and overall community dynamics. This study aims to investigate how post-fire stand composition (15–60 years after fire) shifts from pre-

fire conditions. Characterizing these shifts will improve our understanding of long-term landscape dynamics and inform best management practices in boreal forests. We are using pre- and post-fire data from unmanaged wildfires that burned between 1950 and 2003 in Alberta. Forest composition is quantified by forest type and relative tree species abundance. By quantifying patterns of post-fire shifts, we will establish a baseline for the expected magnitude and direction of changes in post-fire species composition relative to pre-fire composition. This baseline will allow us to identify areas exhibiting atypical patterns of post-fire change. Our research will highlight variability in boreal post-fire stand types and provide a framework for identifying areas experiencing weak resilience or recovery to fire.



Stand-Replacing vs Stand-Maintaining Fires

Cameron E. Naficy, Professor, Wildland Fire, Salish Kootenai College, and founder of GreenFire Geomatics, LLC

Bio

Cameron E. Naficy is Professor of Wildland Fire at Salish Kootenai College and founder of GreenFire Geomatics, LLC. He is a disturbance and landscape ecologist that has studied historical and modern forest dynamics, primarily in the Pacific Northwest and Rocky Mountains. In his work, he uses a combination of paleoecological methods, photogrammetry, remote sensing, and statistical modeling. He has worked as a research scientist at Oregon State University and the University of British Columbia and also served as a boundary spanner for the Ecology and Forest Health Protection Programs in the Pacific Northwest Region of the U.S. Forest Service.

Abstract

For forests like those of southwestern Alberta, fire-climate models suggest that increasing fire frequency will surpass critical tipping points and cause widespread forest loss by the mid-21st century. Moreover, the lack of robust information about fire-driven forest dynamics and resilience thresholds in this region has hindered development of effective management responses to these challenges. Here, we present results from a large-scale study of historical fire regimes and landscape condition along a gradient of fire frequencies in lodgepole pine, Douglas-fir, and aspen forests of the southwestern Foothills of Alberta. Historical fire frequency spanned the range of critical fire frequencies predicted to cause ecosystem collapse, yet forest largely persisted. Rather than switching to a non-forest state under high fire frequency, fire regimes shifted from one of predominantly stand-replacing effects to a mixed-severity regime, more complex forest structures and landscape pattern, and greater dominance of aspen. We discuss feedback mechanisms and cultural influences that contribute to these mechanisms of forest resilience.



HEALTHY LANDSCAPES PROGRAM (HLP) SHOWCASE AGENDA

October 14-15, 2026 | Chateau Lacombe, 10111 Bellamy Hill | Edmonton, Alberta

Breakfast & lunch provided

Purpose Statement

- 1) To engage in a retrospective of HLP research and learning outputs relevant to forest resource management today.
- 2) Hosting a gathering of EBM practitioners to facilitate connection as a community of learners, share knowledge and experiences in applying EBM on the landscape at land use, FMP, and operational scales.
- 3) Share stories of integration of NRV knowledge across planning scales and jurisdictions.
- 4) In looking back to look forward, we may see what is possible for future work of HLP.

Time	Day Two: The 'M' Part of EBM	Speaker
7:30	COFFEE & HOT BREAKFAST	
8:30	Morning Opening	
9:00	Theme #4: Wildfire Risk 1. What is Wildfire Risk? (and to Whom & What?) 2. New Tools for Evaluating Fire Risk 3. Forest management impacts on fuel composition, fuel structure, and fire behaviour at multiple scales in Alberta forests 4. Using Prescribed / Cultural Fire Panel Discussion: Planning Implications at all Scales	Jen Beverly – University of Alberta Air Forbes - University of Alberta Jared Randall - University of Alberta Sonja Leverkus – Shifting Mosaics
10:00	REFRESHMENT BREAK	
10:30	Theme #5: (Other) Social and Economic Aspects of EBM 1. EBM is not Just About NRV: A Reminder 2. HLP EBM Dialogue Session 3. HLP EBM Workshop Summary 4. Disturbance Survey: What do People Think About Disturbance? 5. EBM is a Journey Panel Discussion: Planning Implications at all Scales	David Andison Jules Leboeuf Shelagh Pyper – Fuse Consulting John Parkins –University of Alberta David Andison
11:45	Perspectives on Fifteen Years of the EBM Journey with the HLP	Jules Leboeuf

12:00	LUNCH (provided)	
What Does Integrating EBM Into Multi-Level Planning Look Like?		
1:00	Saskatchewan Case Study: Natural Forest Patterns	Melissa Nordin – Gov't of Saskatchewan
1:15	BC Case Study: Integrating HLP Research and Concepts at Multiple Scales as a Package within the Lakes FLMP	Hans Erasmus – BC MoF
1:45	Integration Perspectives of EBM Principles; Panel & Peer to Peer Discussion	Ken Greenway - Government of Alberta Paul LeBlanc - Louisiana Pacific Kate Lindsay – FPAC Gord Whitmore - Mercer
3:00	REFRESHMENT BREAK	
3:15	Creating conditions for making EBM a work in practice. (Knowledge, Tools, Partnerships & Enabling Strategies)	Facilitated
4:00	Closing Summary & Conversation	
4:30	End of Day 2	

SPEAKERS DAY 2



What is Wildfire Risk? (and to Whom & What?)

Dr. Jen Beverly, Associate Professor, Wildland Fire, University of Alberta

Bio

Jen Beverly is an Associate Professor in the Department of Renewable Resources at the University of Alberta and has been studying

wildfires for over 25 years with a focus on fuels, fire behaviour and fire risk assessment at local to landscape scales. Jen holds MSc and PhD degrees from the Faculty of Forestry, University of Toronto, and an Honours BES from the University of Waterloo. She is a fire behaviour specialist, former helitack crew leader (Ontario Fire Ranger), and former federal government research scientist.

Abstract

Assessments and interpretations of wildfire risk are inextricably tied to the spatial extent under examination (community vs landscape), the duration of the decision-horizon (tomorrow vs next or several years), and the management context (mitigation vs response). Connections between these and other foundational fire risk concepts are highlighted with an overview of exposure and directional vulnerability assessment methods and applications.



New Tools for Evaluating Fire Risks

Air Forbes, Postdoctoral Scholar, University of Alberta

Bio

Dr. Forbes is a Postdoctoral Scholar in the Department of Renewable Resources at the University of Alberta. She is applying spatial analytics to develop novel multiscale approaches to understanding wildland fuels

and wildfire vulnerability. Air holds a BSc in Forestry and PhD from the University of Alberta, and an Advanced Diploma with Distinction in Geographic Information Systems from the British Columbia Institute of Technology.

Abstract

The wildfire exposure metric is a numerical value that indicates the potential for fire to transmit to a location irrespective of weather or ignition patterns. I examined broad- and meso- scale spatial patterns of wildfire exposure within administrative boundaries in Alberta and Saskatchewan. These areas have different intensities of timber harvesting and wildfire management. Timber harvesting did not dampen wildfire exposure to the same extent as wildfires at a meso-scale, and areas with more intensive wildfire suppression had a surplus of high wildfire exposure values.



Forest management impacts on fuel composition, fuel structure, and fire behaviour at multiple scales in Alberta forests

Jared Randall, PhD Candidate, University of Alberta

Bio

Jared Randall is PhD candidate in the Department of Renewable Resources at the University of Alberta. He is investigating interactions between wildfire and timber harvesting, and how this impacts stand structure and fire behaviour. Broadly, Jared is interested in landscape ecology and the extent to which natural disturbances can be emulated through forest management. Jared joined the Wildfire Analytics lab as an undergraduate research assistant in 2020, while completing a BSc Environmental and Conservation Science from the University of Alberta. Since then, he has gained experience as a wildland firefighter and summer field assistant, among other assignments.

Abstract

Fire behaviour is driven by three factors: weather, fuels, and topography, of which only fuels can be altered proactively to achieve more desirable fire outcomes. Several modelling studies suggest that strategic forest management could potentially reduce wildfire activity in Alberta however, there is little empirical evidence to suggest that current forest management is effective at limiting fire activity. My research investigates how fuel load, structure, and modelled fire behaviour changes as cutblocks develop. I investigate the influence of time since harvest on firefighting outcomes in Albertan cutblocks, and find that young cutblocks are more susceptible to challenging fire behaviour. In my next study, I examine fire progressions through harvested landscapes, finding that small, young cutblocks are ineffective at mitigating large wildfire spread. In my third study, I examine changes to fuel load, structure, and modelled fire behaviour in herbicide treated and untreated cutblocks in Alberta.

SPEAKERS DAY 2



Using Prescribed/Cultural Fire

Dr. Sonja Leverkus, Founder, Shifting Mosaics Corporation and Northern Fire WoRx Corporation

Bio

Dr. Sonja Leverkus is the founder of Shifting Mosaics Corporation and Northern Fire WoRx Corporation. Her PhD specialized in landscape ecology and prescribed fire. She

is an RPBio, RPF, PAg, EP, and is a Burn Boss. She is an adjunct professor at numerous universities and member of the Wildfire Analytics Lab at the University of Alberta. The experiences of both safely lighting prescribed fire during burn bans combined with fighting wildfire in severe drought allows Dr. Leverkus the opportunity to observe and adapt to numerous impacts in the pyrocene. Her passion for the land and all its inhabitants drives her to provide ecologically and culturally appropriate natural resource management opportunities for all those she and her teams work with.



EBM is Not Just About NRV: A Reminder

Dr. David Andison, Principal, Bandaloop Landscape-Ecosystem Services, and Healthy Landscapes Program Lead, fRI Research

Bio

Dr. David Andison began his Forestry career with the Ontario government after

completing his BSc in Forestry. After eight years David moved out to Vancouver to pursue his PhD in Landscape Ecology. Dr. Andison began his consulting career soon thereafter specializing in exploring and developing EBM (Ecosystem-Based Management) tools and knowledge. His research focuses largely on fire history, and his other interests include simulation modelling, biodiversity monitoring, developing decision-support tools. He is currently the architect and Program Lead for the Healthy Landscapes Program at fRI Research, although his other work takes him to BC, Saskatchewan, NWT, Manitoba, Ontario and Nova Scotia. David is an Adjunct Professor at UBC Forestry and U of A working with a wide range of academics.

Abstract

In 2006, the HLP initiated an adaptive management operational scale pilot study. The idea was to create a large “natural” disturbance event across three FMA areas in one of the foothills caribou ranges. The final 8,000 ha Event had a significant amount of unharvested remnant forest in the form of both corridors and stepping stones. We had pre-collar caribou data for ten animals two years before planned activities with the funds to follow the animals for another five years post-harvest. In the end, the plan fell apart and represents a significant lost opportunity to this day. But this project is not about blame, but rather what we learned.



HLP EBM Dialogue Session

Jules Leboeuf

Bio

With 40 years of experience in natural resource management—from fieldwork as a forest officer to senior leadership in Wildfire Management with the Government of Alberta—he views dialogue as vital to building trust in both field and boardroom settings.

His knowledge of natural resource management and human behaviour enables teams to work through complex challenges more effectively through reflective dialogue. As an organizational development process consultant, he works with diverse individuals and organizations, modelling transparency, mutual learning, and fostering safe spaces for conversation. These principles guide the effort he devotes to building shared understanding and effective action.

He will be presenting findings from a series of dialogue sessions hosted by HLP in 2017. A second presentation will offer insights and practical knowledge for navigating the EBM learning journey.

He is a certified facilitator and trainer through the Center for Contemplative Dialogue in Georgetown, Indiana, USA, and holds certificates in System Mapping and Design from the Unschool of Disruptive Design.



SPEAKERS DAY 2



HLP EBM Workshop Summary

Shelagh Pyper, Principal, Fuse Consulting

Bio

Shelagh is an environmental educator, science communicator and facilitator. She has a strong understanding of conservation, land management and ecology and over 20 year's experience communicating science to the general public. She has worked with academic institutions, non-profits, government and industry to connect knowledge to practice and build trust and understanding across disciplines and sectors.



Disturbance Survey: What do People Think About Disturbance?

Dr. John Parkins, Dean and Executive Officer, Augustana Campus, University of Alberta

Bio

John Parkins is Dean and Executive Officer at the Augustana Campus, University of Alberta. Prior to assuming this position in July 2024, Dr. Parkins worked for almost 20 years as a professor of environmental sociology in the Department of Resource Economics and Environmental Sociology at the University of Alberta. His research and teaching examine the social context of resource development, renewable energy, and sustainable agriculture in Alberta.

Abstract

Forest managers face increasingly difficult trade-offs in balancing social, economic, and ecological outcomes. While existing research on public perceptions of disturbance often isolates a single disturbance type (e.g., insects), such narrow focus limits our understanding of how the public weighs competing management alternatives. To address this gap, we conducted a factorial survey experiment (i.e., vignettes) in western Canada to evaluate the public's acceptance of common forest disturbance options. Results indicate that insect and disease outbreaks are preferred to wildfire and harvest events. Support for disturbance changed depending on socio-demographic characteristics (male and/or rural), factual knowledge of Canadian forests, concern for safety and economic impacts, and acceptance of Indigenous partnerships. Although most respondents identified Indigenous communities as crucial partners in maintaining healthy forests, respondents were less willing to support direct Indigenous management of disturbances, such as wildfire. In this presentation, I discuss the implications of these findings in light of evolving public preferences and management alternatives.

EBM is a Journey

Dr. David Andison, Principal, Bandaloop Landscape-Ecosystem Services, and Healthy Landscapes Program Lead, fRI Research

(Bio and photo on page 19)

Abstract

The original, intended version of EBM is a true paradigm shift – that shift being all about what it is that we believe we are managing. This has already been noted many times throughout the last two days as depicted on the EBM diagram model on the wall. Towards a more inclusive version of EBM, everyone is somewhere along a spectrum. The HLP has developed some tools to help evaluate how far along that spectrum one is.

Perspectives on Fifteen Years of the EBM Journey with the HLP

Jules Lebeouf

(Bio and photo on page 19)

Saskatchewan Case Study: Natural Forest Patterns

Melissa Nordin, Government of Saskatchewan



BC Case Study: Integrating HLP Research and Concepts at Multiple Scales as a Package within the Lakes FLMP

Hans Erasmus, Land and Resource Specialist, BC Ministry of Forests

Bio

Hans Erasmus is a Land and Resource Specialist with the BC Ministry of Forests whose work focuses on wildfire resilience, ecological sustainability, and landscape-scale forest management. Over the past decade, he has worked in wildfire operations, wildfire risk reduction planning, collaborative stewardship, and forest landscape planning across northern British Columbia. Hans played a key role in advancing the Lakes Resiliency Project and incorporating wildfire resilience objectives into the Lakes Forest Landscape Plan, including the development of Focused Harvest Areas and Interim Recovery Areas. His work emphasizes applying science, policy, and collaboration to develop practical, implementable forest management strategies.

SLIDO

Slido (pronounced Sly-doe) is designed to enhance engagement in meetings, webinars, and events by allowing participants to ask questions, vote on topics, and provide real-time feedback. It transforms traditional one-way presentations into interactive conversations, helping hosts capture audience opinions, prioritize questions, and spark dialogue.

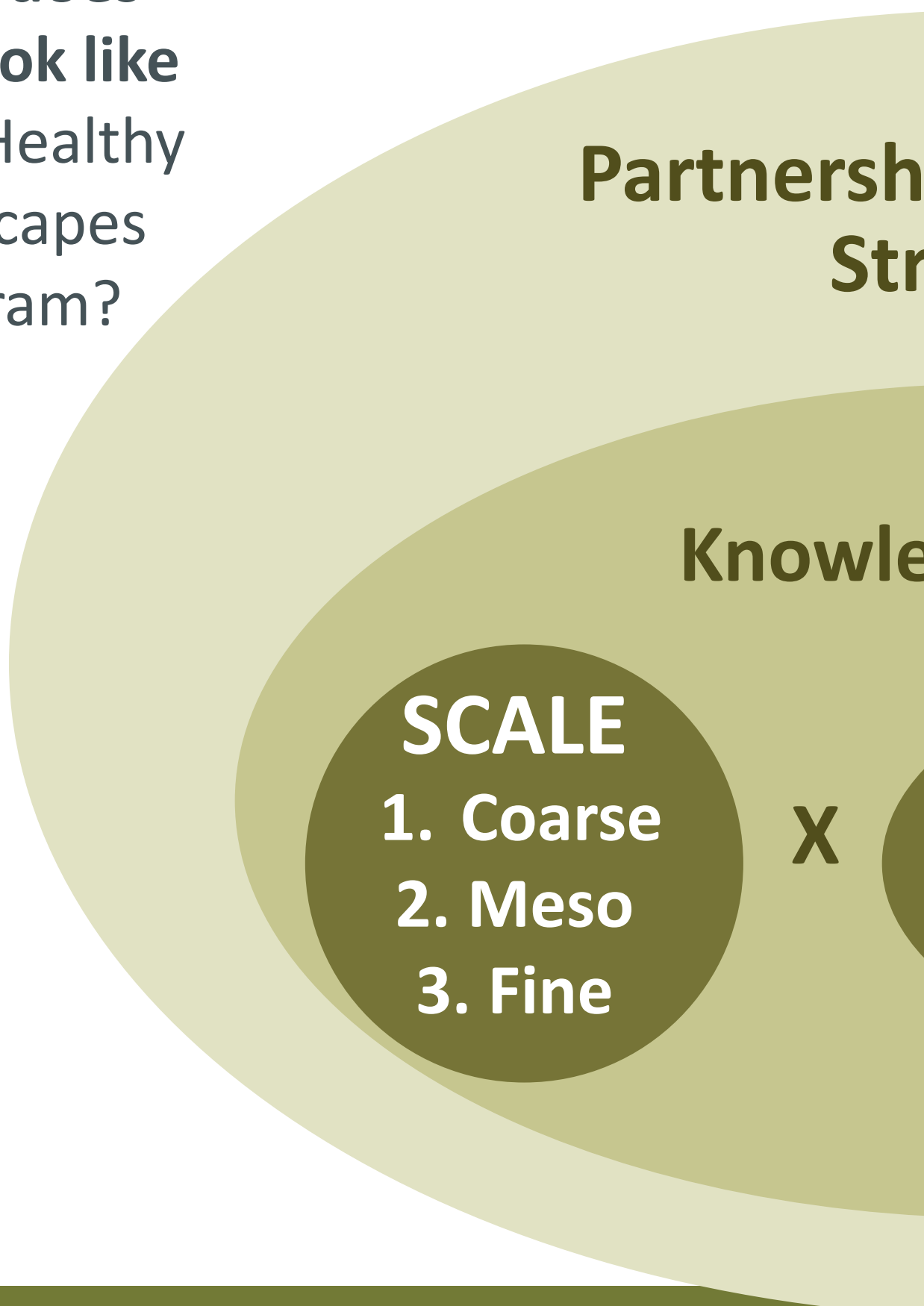
We may use Slido to gather questions after each set of talks. We will definitely use Slido at the end of day 2 to make a WordCloud and get your feedback about the event.



Year	Project Title	EBM Element			
		NRV Knowledge	Tools	Partnerships	Enabling Strategies
2030	Fire Risk and Forest Mgmt. Phade II: Exploring Mgmt. Scenario Options at Landscape Scales		x		x
2028	Post-Disturbance Stand-Type Shifts	x			
2028	LandWeb Users' Group		x	x	x
2028	Beyond the Trees: Integrating Traditional Needs and Knowledge into Disturbance Dynamics: Phase II	x		x	x
2027	Fire Risk and Forest Mgmt. Phase I: Identifying Key Factors for Modelling Fire Threat				x
2027	EBM Tips and Techniques		x		x
2027	Dave on the Road	x			x
2027	Fire-Harvest Blueprint			x	x
2026	Seral-Stage NRV Modelling of Caribou Habitat in Alberta and Saskatchewan	x			
2026	LandWeb Modelling Upgrade to Sakaw-Aisky FMA Area	x			
2026	Benefits of Disturbance P2: Annotated Summary of Fire and Harvesting Impacts	x	x		
2026	Fire vs. Harvest Patterns at Disturbance Event Scales	x			
2026	HLP Showcase	x		x	x
2026	Reconciling Pre-industrial Patterns, Caribou Habitat, and Management Reality at Meso Scales	x	x		
2026	Beyond the Trees: Integrating Traditional Needs and Knowledge into Disturbance Dynamics: Phase I	x		x	
2025	Benefits of Disturbance P1: How Do People Feel About Disturbance?			x	
2024	Socio-Economics of EBM				x
2023	What Does a <i>Whole Landscape Approach to EBM</i> Look Like?				x
2022	Barriers to EBM				x
2021	Landscapes in Motion: Exploring Mixed Severity Fire Regimes in the Alberta Foothills	x			
2021	Linking Avian Habitat with Landscape Scale NRV Model Output in NE Alberta	x			
2020	LandWeb Simulation Modelling: Generating Coarse-Scale NRV Metrics	x	x		
2018	Understanding EBM Through Dialogue		x	x	x
2018	Sub-Regional Landscape Patterns in the Alberta Foothills	x			
2017	EBM Roadmap Workshop		x	x	
2017	Creating Wildfire Mortality Maps and Metrics from Landsat Images	x	x		
2016	Introduction to Natural Disturbance Short-Course		x		x
2015	Mixed Severity Fire Pilot Study	x			
2014	The Stony 800 Integrated Planning Healthy Landscape Demonstration			x	x
2013	Upland Coarse Woody Debris Dendro Study	x			

Year	Project Title	EBM Element			
		NRV Knowledge	Tools	Partnerships	Enabling Strategies
2012	The Dynamics of Large Woody Debris in Small Streams	x			
2012	The NEPTUNE Decision-Support-Tool app for NRV-Inspired Operational Planning		x		
2012	Natural Wildfire Patterns in the Western Boreal: What Do Natural Wildfire Events Looks Like?	x			
2012	NEPTUNE: A NRV-CRV GIS Disturbance Event Pattern Tool		x		
2010	Historical Fire Regimes, Water and Climate in the Alberta Foothills	x			
2009	Determinants of Wildfire Remnant Survival	x			
2008	Comparing Cultural to Natural Disturbance Patterns at Landscape Scales	x			
2007	OnFire Annotated Wildfire Research Database for the Western Boreal		x		
2006	Disturbance Patterns in Riparian Zones: Does it Matter?	x			
2006	Fire Refugia in Natural Wildfires: What Burns and Why?	x			
2005	Comparing Cultural to Natural Disturbance Patterns at Operational Scales	x			
2005	Hwy 40 North Demonstration Project: A Multi-Jurisdictional Pilot Study			x	x
2005	Snag Dynamics Project	x			
2004	A More Detailed Look at Natural Wildfire Patterns in the Western Boreal	x			
2003	Detailed Disturbance Dynamics in Riparian Corridors	x			
2003	Dendro Analyses of Large Wood in Small Streams in the Alberta Foothills	x			
2002	Econtonal Patterns: How do Disturbance Patterns Translate Across Jurisdictional Boundaries?	x			
2002	Seral-Stage NRV for the Weldwood FMA Area	x			
2002	Firesmart - Forestwise JNP Initiative		x	x	
2001	Mountain Pine Beetle Risk in the Alberta Foothills	x			
2000	Defining Fire Regime Zones in the West-Central Alberta Foothills	x			
2000	Edge Architecture of Wildfires	x			
2000	Residual Heterogeneity Within Wildfire Events	x			
2000	Fire Effects Research	x			
1999	Disturbance Regime Zones of Western Boreal Canada	x			
1999	Disturbance History of the Montane Area of JNP	x			
1999	Island Remnants Project: Phase I: Alberta Foothills	x			
1998	How Old is 'Old Forest' in the Alberta Foothills?	x			
1998	The Accuracy of Forest Inventory Ages in the Western Boreal	x			
1998	Creating a Time-Since-Fire Map for the Weldwood FMA Area	x			
1998	Landscape Patterns in West Central Alberta Foothills	x			
1998	Eastern Slopes Disturbance Regime Description	x			
1997	Repeat Oblique Photography in the Alberta Foothills	x			

**What does
EBM look like
to the Healthy
Landscapes
Program?**



**ips & Enabling
strategies**

**NRV
edge & Tools**

TYPE

- 1. Disturbance**
- 2. Ecosystem condition**
- 3. Consequences**



