LAND, WATER, & SOCIETY
Program Overview

KEYNOTE SPEAKER:

Dr. Sara Scherr, EcoAgriculture Partners

Presentation**:**

Innovations in Integrated Landscape Management: Experiences from around the Globe

POLICY STREAM 1:

LAND

Human civilization is built upon the land. Even in this digital age, many aspects of our well-being and prosperity are heavily dependent on our relationship with the land, and the many amenities and opportunities afforded by good land stewardship. The growth of our civilization, however, has led to new stresses being applied to our landscapes. Some regions continue to see their best agricultural lands converted to other uses, while others are witnessing a significant degradation of soil quality.

In this session, we will examine humanity's relationship with the land, both globally and here in Alberta. As our province continues to develop regional land use plans, we will consider challenges and opportunities, and the importance of land use policy.

Bringing Soil to Life: Promoting and Conserving Healthy Soil

PLENARY SPEAKER PRESENTATION:

Nicole Masters, Director, Integrity Soils

Soil health is an integral part of an effective farm operation. How can we identify and limit the threats to this important resource, while reducing the impact of pests, weeds and disease? How can we avoid further soil degradation? Regenerative agriculture focuses on designing a farm system based on observation, ecological principles and good sustainable management practices that can improve the soil and the environment while enhancing the farm's bottom line.

Maintaining a Balance: Urban Growth and Land Conversion

EXPERT PANEL:

Brent Swallow, Professor, Faculty of Agricultural, Life and Environmental, U of A

Sharon Shuya, Manager Regional Projects, Edmonton Metropolitan Region Board

Urban populations are growing. With that growth comes increased pressure on our agricultural and natural lands as cities look to accommodate their burgeoning populations and promote economic development. How has this growth impacted agricultural land in Alberta? What are municipalities doing to balance economic growth with the conservation of agricultural and natural landscapes?

CONCURRENT SESSION 1A

Land Annexation: Does a Change in Jurisdiction Improve Land Use?

Panel:

Sandeep Agrawal, Professor & Inaugural Director, Urban and Regional Planning Programs, U of A

Eleanor Mohammed, General Manager, Integrated Growth & Infrastructure

Jeff Greene, Director of Planning and Development, City of Lethbridge

The process of municipal annexations seriously affects both urban and rural agricultural communities and is the most common form of government restructuring to meet the demand of growing populations.

This session will explore how effective annexation is in expanding municipal boundaries as well as the implications of this strategy. Has annexation provided the anticipated planning and land use control measures in city regions? Were the predicted positive economic outcomes realized?

CONCURRENT SESSION 1B

Accounting for Natural Wealth and Ecosystem Services

Panel:

Marian Weber, Principal Scientist, Ecosystem Management, InnoTech Alberta

Lara Ellis, Director of Strategic Initiatives, ALUS Canada

Agricultural lands and natural spaces provide important ecosystem services to all Canadians yet they are not accounted for when natural resource wealth is calculated. How can we create frameworks that account for this wealth? What type of data is required?

Sustaining agricultural, wildlife and natural spaces requires the support of farmers, ranchers and communities across Canada. How can we promote the conservation of landscapes that produce these valuable ecosystem services? What impacts have current efforts had?

POLICY STREAM 2:

WATER

Water is humanity's most vital fuel. In Canada, a history of near-universal water availability has led many to take its presence for granted, but as our climate changes and population growth places increasing demands on our supply, we have become increasingly aware of our relationship with this resource. Productive use of our land requires efficient water management and Alberta has acknowledged this with land use and watershed planning in recent years.

This session will explore Alberta's water policies in relation to land use, and explore the critical linkages between land and water both within our province, and around the world.

Designing Resilient Communities for a Changing Climate

PLENARY SPEAKER PRESENTATION:

Blair Feltmate, Head, Intact Centre on Climate Adaptation, University of Waterloo

Extreme weather as a result of climate change can lead to catastrophic flooding, impacting businesses, families and whole communities. Proper valuation of natural infrastructure and innovative community design can help communities reduce their risk of flooding. How can we quantify the economic value of natural infrastructure to ensure our residential communities are flood resilient?

Looking Forward: Mitigating the Risks and Impacts of Future Flooding in Alberta

EXPERT PANEL:

Carolyn Bowen, Manager of Watershed Planning, the City of Calgary

Mark Comerford, Director, Resilience Projects, Watershed Adaptation and Resilience, Environment and Parks

Megan Van Ham, Project Manager, Alberta WaterSMART

Erik Butters, Councillor, Municipal District of Bighorn

The Alberta Flood of 2013, was one of the worst floods in Alberta's history. How is the provincial government supporting water management and mitigation? What strategies are municipalities/municipal districts developing to mitigate the risks and impacts of future floods? How are these strategies influencing urban design?

CONCURRENT SESSION 2A

Managing our Water for the Long term Sustainability of our Agriculture Sector

Panel:

Evan Davies Associate Professor, Department of Civil and Environmental Engineering, University of Alberta

Monireh Faramarzi, Assistant Professor, Faculty of Science - Earth & Atmospheric Sciences Admin, University of Alberta

Jamie Wuite, Executive Director , Irrigation and Farm Water Branch , Agriculture and Forestry

Simulation models provide an important tool to explore different agricultural and water resources scenarios and analysis in real time. How can these models help guide decisions related to water reliability, scarcity and demand, both now and into the future? How can they help create policies that will ensure a sustainable expansion of the irrigation sector in the province, especially in light of the uncertainties of climate change?

CONCURRENT SESSION 2B

Successful Partnerships in Action

Panel:

Susan Ellis, President and Engagement Committee Chair, Pigeon Lake Watershed Association

Mary Ellen Shain, Watershed Planning and Management Coordinator, North Saskatchewan Watershed Alliance

There are a great number of successful resource-focused alliances in Alberta. This session will feature the successes of two local organizations whose innovative approaches to water sustainability issues have strengthened water management in the region. What can we learn from the experiences of these alliances? How could these successes be adopted to improve regional planning?

POLICY STREAM 3:

SOCIETY

How we think and feel about our land and water fundamentally shapes the policies created by our governments to manage them. Many stewardship policies built upon strong scientific foundations are defeated because they are inconsistent with widely-held attitudes and values, even if those perspective are not based in fact. Understanding how society's feelings and opinions on land use and water issues influence the policy environment, and guide government actions, is vital to effectively influencing policies that can positively impact our landscape for years to come. In this session, we will explore how public sentiments have influenced land and water management policies in Alberta and around the world — and how opinions can successfully be informed and altered through education and advocacy by academia, stakeholder groups, and governments themselves.

Reimagining the Future: How Communities Can Develop Capacity to Adapt, Transition and Transform

Plenary Speaker Presentation:

Leonie Pearson, University of Canberra · Institute for Governance and Policy Analysis

Recent changes in Alberta's Municipal Government Act encourage greater collaboration between rural municipalities and between rural and urban municipalities. Communities will need to work together to effectively plan for and steward our province's land and water resources. To proactively manage our human-environmental systems and build resilient communities, community-level capacity will need to be developed. What lessons can we learn from Australian experiences that will promote locally developed solutions?

A Pragmatic Look at Indigenous Stewardship: Key to Sustainability, Conservation, & Land Use Planning

Expert Panel:

Fort McKay First Nation

Moose Lake Access Management Planning Process

Bori Arrobo, Senior Manager Environment and Regulatory for Fort McKay First Nation
Jean L'Hommecourt, Traditional Land Use Researcher, Fort McKay First Nation
Marie Lagimodiere, Consultant, Lagimodiere Finigan Inc.

McMurray Métis, MNA Local 1935

Trapper Liaison and Cultural Sustainability

David Waniandy, Trapper Liaison, McMurray Métis
Gillian Donald, Environment and Land Advisor, McMurray Métis

Fort Chipewyan Métis, MNA Local 125

Indigenous Stewardship: Key to Sustainability, Conservation, & Land Use Planning

Kim Dertien-Loubert, Lands, Environment, and Heritage Advisor, Fort Chipewyan Métis

Land and water are foundational components necessary for the cultural sustainability of Indigenous peoples. Indigenous and non-indigenous Albertans view and understand stewardship, land values, natural wealth, and what is required for their sustainable management now and into the future, differently. Land use planning processes and policies legally and ethically require the direct and active involvement of Indigenous peoples in decision-making early on. The Supreme Court decision on the Peel watershed planning process is a stark reminder of this necessity and obligation for shared vision and responsibility. Indigenous communities in northeastern Alberta are particularly poised for conversation on these and related issues.

CONCURRENT SESSION 3A

Building Sustainable Communities

Panel:

Norine Ambrose, Executive Director, Cows and Fish, Alberta Riparian Habitat Management Society

Leith Deacon, Assistant Professor, Faculty of Science - Earth & Atmospheric Sciences, University of Alberta

Working with municipalities and drawing on community involvement in decision making is crucial in the land planning process. This session will explore the importance of emphasizing the role of local communities in problem solving, decision making and developing a contextually appropriate path toward long term sustainability and resiliency.

CONCURRENT SESSION 3B

Contested and Complex Social Values and the Challenge of Preserving Land in Alberta

Panel:

Robert Summers, Associate Director, Urban and Regional Planning, Department of Earth & Atmospheric Sciences, University of Alberta

The session will begin with a presentation by Dr. Summers on his research into the role that societal values and beliefs, and local relationships play in municipal decision making regarding land development and the protection of agricultural land. This will be followed by a panel discussion that explores the complex nature of decision making in real world contexts and the options to better integrate such considerations in policy development and implementation.

Post Conference Workshop:

Using Ecosystem Services and Biodiversity Assessment for Effective Land-Use Decisions

Learn through an Alberta example how assessment tools can be applied to inform municipal and watershed decisions. We will take you on a journey that will help you explore the objectives or values of your area, the current supply of ecosystem services and/or biodiversity, and how you can use scenario modeling to sort through complex problems and better understand trade-offs for green infrastructure projects

We hope each participant will take-away:

1. Information on the supply of at least one ecosystem service and/or biodiversity their municipality or watershed of (planning region).
2. Ideas of where green infrastructure may be more desirable than grey infrastructure
3. Excitement to work with the Ecosystem Services and Biodiversity Network on a specific case study or project in your region