## Alberta Land-use Knowledge Network

## March 2019

Moving knowledge

into practice

## Natural & Green Infrastructure

Welcome to the *Alberta Land-use Knowledge Network's* new monthly newsletter in which we share information and resources about land use planning in Alberta.

The Land-use Knowledge Network was launched in 2011 and the Land Use Planning Hub in 2018. These two tools continue to grow and support research-based land use decision making throughout the province

If this newsletter was forwarded to you, please consider **subscribing** to our monthly publication.

Review past issues of our newsletter



It's the 1<sup>st</sup> birthday of our newsletter and we have decided to send a gift to one of our subscribers. To be entered into the draw for this fantastic book, subscribe before March 31, 2019. All current subscribers will also be included in the draw. We'll announce the winner in next week's newsletter and contact the subscriber to get her or his mailing address. Thanks for joining us and if you have any input for the editor, please contact Linda.



## Land Use Planning Hub

The **Land Use Planning Hub** is an informal network that supports the implementation of Alberta's regional plans.

## **Currently on the Land Use Planning Hub**

## Exploring the past and present of Alberta's Public Land Use Zones (PLUZ)

Alberta's public lands are managed with different types of designations – from parks to unmanaged lands. The degree of protection, access and supervision vary between designations. Special cases – for unique uses or distinctive regions – are handled by the designation of a public land use zone (PLUZ).



Check out the Land Use Planning Hub a brief look into the history, framework and types of PLUZ in Alberta.



#### **Planning for wildfires in Alberta**

Wildfires are among the most notable natural disasters that Albertans face on an annual basis. And with a changing climate, the intensity and quantity of wildfires is expected to increase.

Municipalities – especially those within or beside forested regions – have a major role in preventing and mitigating wildfires. There are programs, tools and funding available for municipal governments to manage the costs and reduce the impacts of fires on public and personal property.

For more information about the Land Use Planning Hub, contact the website's coordinator, Jeff Wiehler

## North Saskatchewan Regional Plan (NSRP)

The North Saskatchewan Region contains a diverse landscape encompassing Rocky Mountain, rolling foothill and prairie parkland ecosystems. The North Saskatchewan Region includes headwaters forests that provide clean water to downstream communities, mountains foothills, and parkland that support a diversity of habitats that provide homes for species at risk and serves as a major source of recreation and tourism.

The North Saskatchewan Regional Advisory Council

Read Jeff Wiehler's post entitled Preparing for the next regional plans

Check out our resource list related to the North Saskatchewan Regional Planning process.

**Recommendations Document from the North Saskatchewan Regional Advisory Council** 



## **Calls for Input**



#### Webinars on Land Use Planning: Call for Presentations

fRI Research hosts a monthly webinar series on research, news and updates on natural science, conservation and land use topics. Webinars are hosted by fRI Research and available to the public. Presentation ideas on land use planning in Alberta are being accepted. fRI Research will manage the promotions, recording and facilitation of the webinar to a target audience of land use professionals in the province.

## Natural & Green Infrastructure

## Land Use Topics

**Green infrastructure** solves urban problems such as storm water management, air and water quality, energy production, climate change issues, urban heat stress, and more by using or replicating nature. In addition to providing infrastructure to mitigate flooding risks,

**Green infrastructure** is defined as an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations. In our view, green infrastructure is the ecological framework needed for environmental, social and economic sustainability—in short it is our nation's natural life sustaining system. Green infrastructure differs from conventional approaches to open space planning because it looks at conservation values and actions in concert with land development, growth management and built infrastructure planning. Other conservation approaches typically are undertaken in isolation from — or even in opposition to — development. (Benedict & McMahon, 2001)

**Natural infrastructure** can be considered an active form of nature likely focused on the most important of these benefits. Natural infrastructure comprises an active management component aimed at providing (or conserving) the key advantages—such as climate resilience, clean water and biodiversity.

For a system to count as natural infrastructure, it needs to tick three boxes:

- It is natural or naturalized. For example, naturally occurring wetlands are included as well as constructed wetlands or even floating treatment wetlands that emulate the functions of natural ones.
- It is targeted at and/or managed by humans. Natural systems or processes that occur without human management don't count. This active management means natural infrastructure provides higher benefits than comparable natural systems in neighbouring areas and similar contexts.
- It provides enhanced gains, including, for example, climate resilience to communities, enhanced water quality, floodwater retention, etc. (Dimple, 2018)

Green Infrastructure: Smart Conservation for the 21st Century



SPRAWL WATCH CLEARINGHOUSE MONOGRAPH SERIES

Benedict, M.A. & McMahon, E.T. (2001) Green infrastructure: Smart conservation for the 21st century. Washington, DC: Sprawl Watch Clearinghouse Monograph Series.

This monograph introduces green infrastructure as a strategic approach to land conservation that is critical to the success of smart growth initiatives. Green infrastructure is "smart" conservation that addresses the ecological and social impacts of sprawl and the accelerated consumption and fragmentation of open land. This monograph describes the concept and values of green infrastructure and presents seven principles and associated strategies for successful green infrastructure initiatives.

Stanley, M., Puzyreva, M., & Dimple, R. (2019). Advancing natural infrastructure in Canada: A forum report. Winnipeg, MN: International Institute for Sustainable Development (IISD).

In Canada and globally, there is growing use of natural infrastructure (NI)—actively managed natural systems and resources such as plants, soil and wetlands—to address increasing risks related to climate change and to meet pressing environmental and economic needs. A recent report on Combating Canada's Rising Flood Costs by the Intact Centre on Climate Adaptation, IISD and the Insurance Bureau of Canada shows that NI projects across the country demonstrate value for money in providing critical benefits to local communities and broader societal needs.



## **Spotlighted Organizations**

### International Institute for Sustainable Development (IISD)

The IISD is an independent think tank championing sustainable solutions to 21st century problems. Their mission is to promote human development and environmental sustainability.





#### **Evergreen Canada**

Cities that are low carbon, inclusive to all and sustainable at their core. Cities to live, move, work, play, learn and thrive in.

Since 1991, we've been facilitating change. Working with other city builders to convene, collaborate and catalyze ideas into action. Their teams connect with many stakeholders to lead with a mindset focused on solutions. They collaborate to develop innovative ideas and catalyze change by testing solutions, developing prototypes and scaling projects.

The Land-use Knowledge Network is a repository of a wide variety of resources to support your land use and planning research. Take a look at these items...

**Resources on the LuKN** 

### Land Use Planning Topics: Land Tools Compendium-Green Infrastructure (scholarly references)

Friends of the Greenbelt Foundation (2017) A Green Infrastructure Guide for Small Cities, Towns and Rural Communities. Green Infrastructure Ontario Coalition

CCME. (2018). Best practices and resources on climate resilient natural infrastructure. Canadian Council of Ministers of the Environment.

Gartner, T., Mulligan, J., Schmidt, R., & Gunn, J. (Eds.). (2013). Natural infrastructure: Investing in forested landscapes for source water protection in the United States. Washington, DC: World Resources Institute.

## **EVENTS**

If you have an event that you would like to see included in our monthly newsletter, please email Linda with the details.

## March

An RSVP is required to attend this free event Parkland Institute: Canada's Energy Future: The Path to Transition 4 March 2019, Calgary

5 March 2019, Edmonton

#### Available in French & English

Federation of Canadian Municipalities (FCM) Webinar: New online tool for municipalities to assess clean energy projects 6 March 2019, online

Compost Council of Canada (CCC): Compost Matters in Alberta 6-7 March 2019, Red Deer

Call for Proposals Deadline **2019 APPI Conference: Celebrate Strength** 7 March 2019, proposals for October conference in Fort McMurray

*Free event, some travel subsidies available* **The Alberta Healthy Community Symposium** 7-8 March 2019, Edmonton

Rural Municipalities of Alberta (RMA) Spring 2019 Convention and Trade Show 18-20 March, Edmonton

2019 Red Deer EcoLiving Fair & Workshops 23 March 2019, Red Deer

Apply for funding Improve your municipality with FCM's capital project funding 31 March (deadline)

Call for papers Canadian Rural Revitalization Foundation 2019 Sustainable Communities Conference

31 March 2019, deadline for proposals for October conference in St. Johns, NL

## April

LGAA 2019 Conference Strength Through Networking 2-5 April, Red Deer

Alberta EcoTrust: Environmental Gathering 2019 4-5 April, Calgary

Environmental Services Association of Alberta (ESAA): EnvroTech 2019 23-25 April 2019, Calgary

> 2019 MPB Ecology Research Forum 23-24 April 2019, Edmonton

## May

Canadian Water Network: Blue Cities 2019 7-8 May, Toronto

Alberta Council for Environmental Education (ACEE): Recharge 2019 Conference: Challenges, Opportunities and Solutions in Environmental and Energy Education 23-25 May 2019, Canmore

Tamarack Institute: ABCD: Healthy Neighbourhoods, Healthy Cities 28-30 May 2019, Edmonton

Federation of Canadian Municipalities (FCM) 2019 Annual Conference and Trade Show 30 May 2019-2 June 2019, Québec City

### June

Early bird rates available now Canada's Oil Sands Innovation Alliance (COSIA): 2019 Oil Sands Innovation Summit 3-4 June, Calgary

## September

International Association of Transportation Regulators (IATR) 32nd Annual Conference: Regulatory Roundup 22-25 September 2019, Calgary

> Save the date AUMA 2019 Convention and AMSC Trade Show 25-27 September, Edmonton

## October

Save the date Canadian Rural Revitalization Foundation 2019 Sustainable Communities Conference 1-4 October 2019, St. Johns, NL

Save the date Recycling Council of Alberta 2019 Conference: Sea Change 2-4 October 2019, Jasper Save the date 2019 APPI Conference: Celebrate Strength 6-8 October 2019, Fort McMurray

Early bird registration available until 31 May 2019 Environmental Services Association of Alberta (ESAA): RemTech 2019 16-18 October 2019, Banff

## November

Save the date ALIDP Conference and Trade Show 6-8 November, Calgary

## NEWS

If you have an announcement that you would like to see included in our monthly newsletter, please email Linda with the details.

#### Long-term renewables plan powers jobs, investment

Alberta's long-term plan for renewable power outlines steps to create more jobs, attract billions in new private investment and grow partnerships with Indigenous communities. 26 February 2019, Government of Alberta

#### **Expanding Ray Gibbon Drive in St. Albert**

Widening Ray Gibbon Drive between Anthony Henday Drive and Villeneuve Road will enhance safety, improve commute times and reduce traffic congestion in the Edmonton Metropolitan Region. 25 February 2019, Government of Alberta

### \$2B Grande Prairie methanol plant to be built by Nauticol Energy

Calgary-based Nauticol Energy announced on Wednesday that it will build a \$2 billion methanol plant near Grande Prairie. The company says the facility will be Canada's largest methanol plant and construction will begin in 2020. The commercial operational date is set for 2022. 20 February 2019, AEN Staff, EnergiNews

### Fifty-eight municipalities across Canada are receiving \$6.4 million in funding to support salaries for staff taking action on climate change and resilience.

These grants, delivered by FCM's Municipalities for Climate Innovation Program (MCIP) and funded by the Government of Canada, help communities address staffing gaps and produce lasting improvements in their operations related to climate change.

19 February 2019, FCM News Release

#### **Energy from waste project gets funds to find site** *Officials from Southern Alberta Energy from Waste Association*

(SAEWA) announced this week they will be moving forward with finding a location for the project after being awarded a \$400,000 funding from the Alberta Community Partnership program grant.

14 February 2019, Jenna Dulewich, Rocky Mountain Outlook

## Central Alberta town commits to recycling and selling wastewater

The town of Thorsby has partnered with Swirltex, an Alberta company that builds water treatment systems, to clean the water in its sewage lagoon. 14 February 2019, CBC News

Local affordable housing project gets \$6 million dollar investment from Province

Fort Saskatchewan residents with a low income will soon have a new choice when it comes to obtaining safe, modern and affordable housing, thanks to the support from the Alberta government.

14 February 2019, Arthur Green, The Whitecourt Star

## Chestermere introduces tax breaks to encourage development

Council hopes the incentive will help fill some vacant lots 13 February 2019, Sarah Rieger, CBC News

## Less than half of Alberta's electricity was coal-powered in 2018, says province

13 February 2019, Clare Clancy, Edmonton Journal

## Okotoks continues to study potential for tiny home development

Okotoks is one step closer to bringing a tiny homes eco-village to town after council on Monday approved the conceptual

### design for the project. 12 February 2019, Sammy Hudes, Calgary Herald

# Cold weather helps kill mountain pine beetle but won't stop epidemic, scientists say

12 February 2019, Janet French, Edmonton Journal

Renewable energy firm proposes massive solar farm for southeast Calgary

8 February 2019, Meghan Potkins, Calgary Herald

#### Agricultural societies to cut costs and emissions

A new government program will help Alberta agricultural societies save money and reduce emissions through energy-efficient upgrades.

7 February 2019, Government of Alberta

#### Solar power to reduce diesel in Fort Chipewyan

Alberta is supporting Athabasca Chipewyan First Nation, Mikisew Cree First Nation and Métis Local 125 in owning and operating a new solar farm that will reduce their reliance on diesel generators.

7 February 2019, Government of Alberta

### Innovation fund cuts emissions, boosts investment

Alberta's most energy-intensive industries are investing more than \$276 million in clean technologies that will create jobs, reduce operating costs and cut emissions. 6 February 2019, Government of Alberta

### **Agricultural Plastics Recycling Pilot Program**

Alberta Agriculture and Forestry is helping fund a three-year pilot program to recycle agricultural plastics in response to

continued advocacy for a better solution to dispose of agricultural plastic waste. 6 February 2019, AUMA

# Pembina going ahead with petrochemical plant joint venture in Alberta

A \$4.5-billion Alberta project to turn propane into plastic will help deliver world prices to land-locked western Canadian oil and gas producers, says Calgary-based Pembina Pipeline Ltd. 4 February 2019, Edmonton Journal

## Ten organizations selected to help Canadian municipalities reach significant carbon emission reductions targets by 2050

The Government of Canada and the Federation of Canadian Municipalities (FCM) are proud to announce a new initiative to help municipalities across Canada reach significant carbon emission reduction targets. The initiative, known as Transition 2050, will fund training and support delivered by 10 partner organizations to groups of municipalities to foster deep emissions reductions.

4 February 2019, FCM

#### Charging up in southern Alberta

Lethbridge is the first of at least 20 communities that will benefit from a new network of electric vehicle charging stations across southern Alberta. 4 Februrary 2019, Government of Alberta

**Grande Prairie praised for energy-efficient upgrades** 30 January 2019, Peter Shokeir, Daily Herald Tribune



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