

Wetland Centre at Evergreen Park – DUC & ELIS Introduction

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Wetland Centre Strategic Planning Workshop
April 24, 2019



Evergreen Learning and Innovation Centre
Inspiring Responsible Resource Development Through Innovation

Outline

- Ducks Unlimited Canada's National Boreal Program
- Evergreen Learning and Innovation Centre
- DUC and ELIS working together



Ducks Unlimited Canada

Mission

Conserve, restore, and manage wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people.

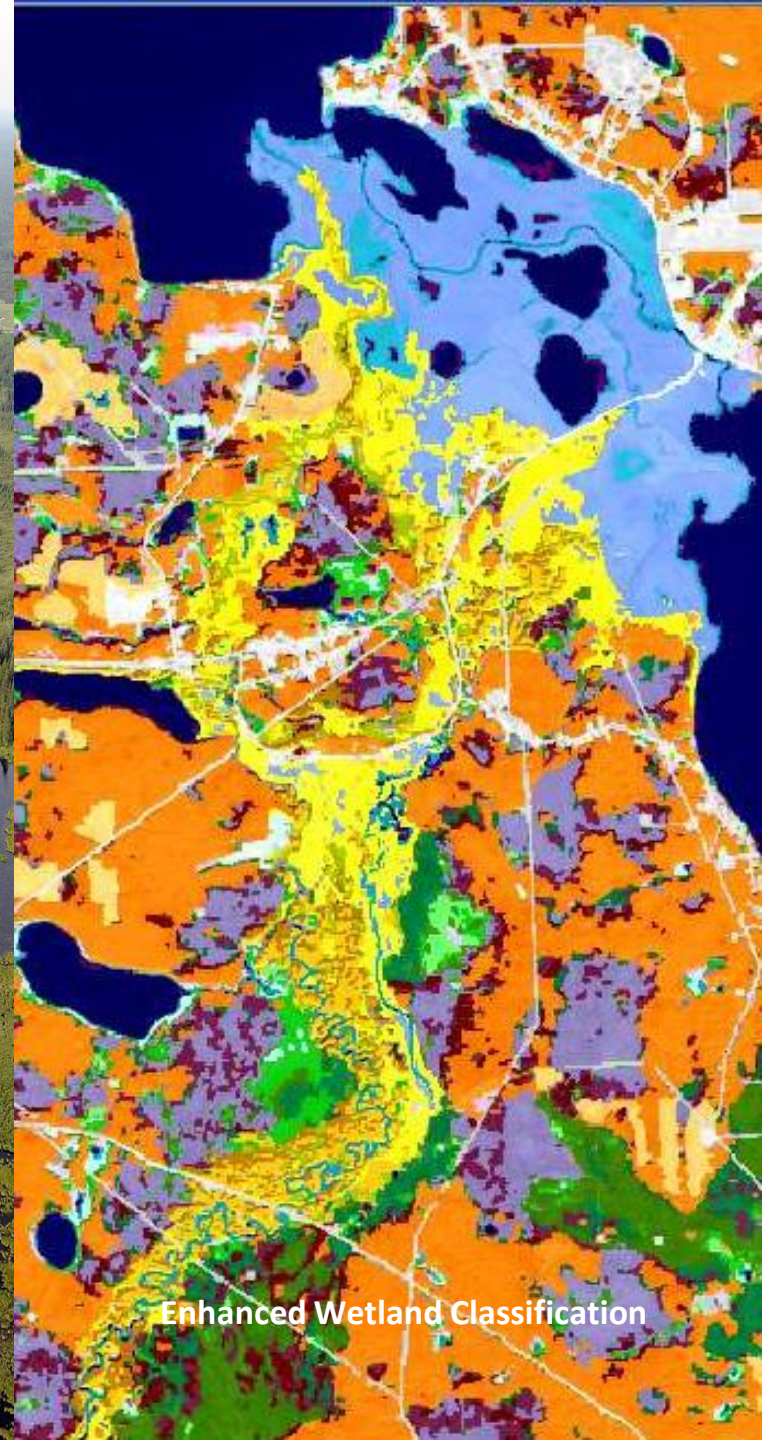
Approaches to delivering on our mission

- Habitat Conservation
 - Direct habitat management programs
 - Extension to industry
 - Public policy
- Research
- Education
- Fundraising



Priority conservation regions





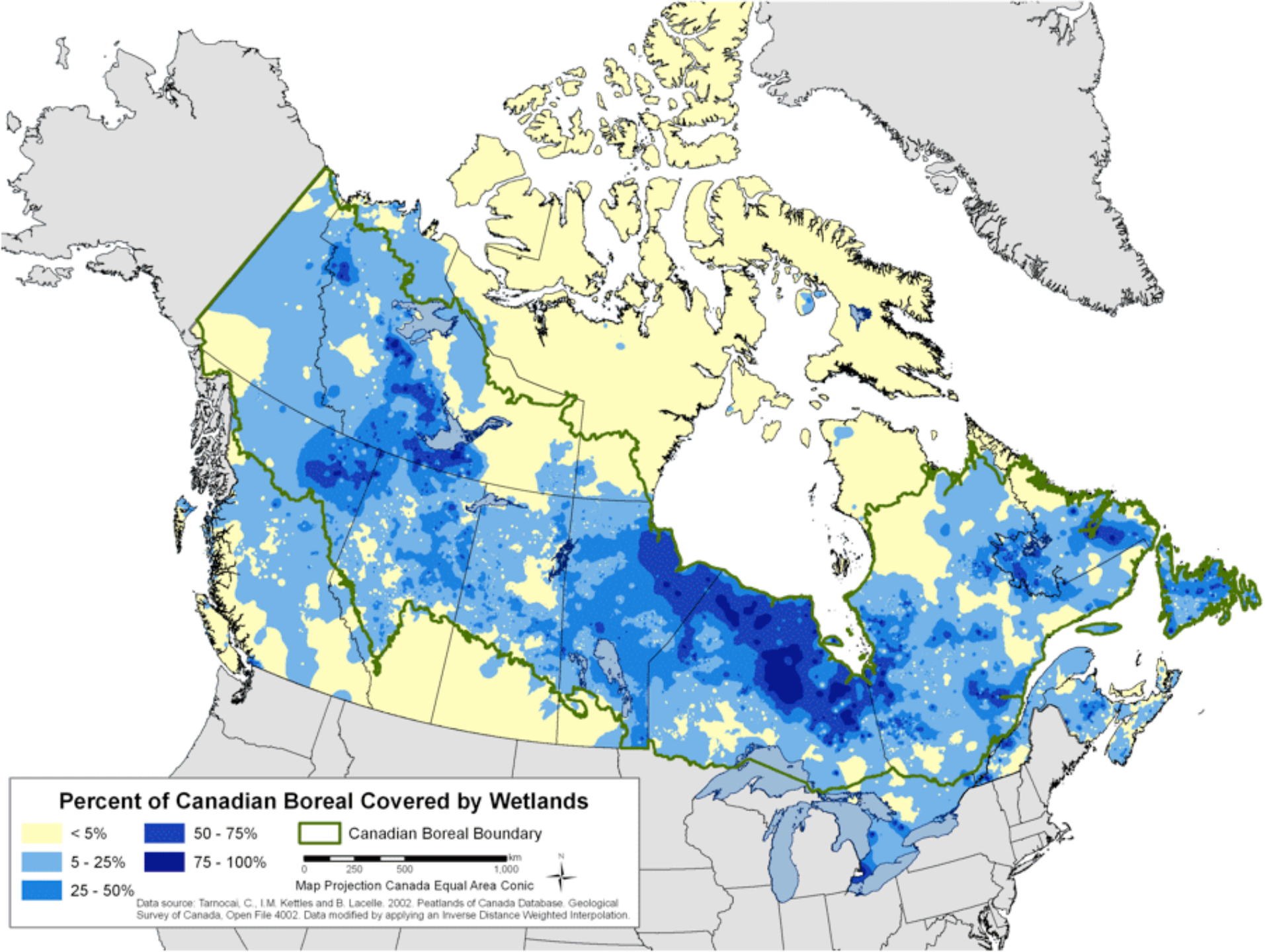
Enhanced Wetland Classification



Why the Boreal?

- Over 85% of Canada's wetlands
- Important waterfowl habitat, over 15 million breeding ducks
- Important habitat for species of interest such as caribou, yellow rail, Canadian warbler and others
- Area of expanding resource development







Bog

Wetland classes



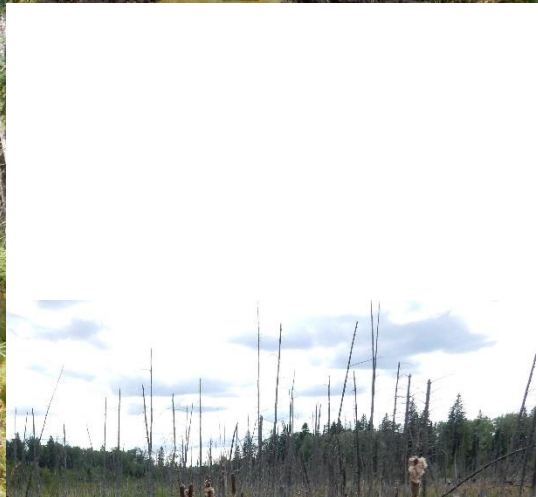
Shallow open water



Fen



Swamp



Marsh

Boreal Conservation Plan


National Boreal Conservation Plan 2015




Ducks Unlimited Canada
Conserving Canada's Wetlands

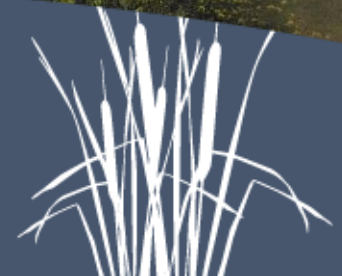
Three main tactics:

- Wetland /conservation policy
- Protection
- Sustainable land use

 Best management practices (BMP)


Ducks Unlimited
Canada

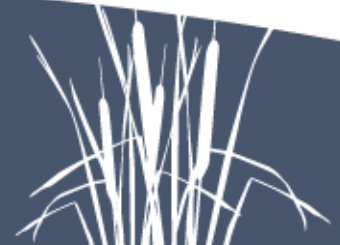
RESCUE  OUR
WETLANDS





BMP Program Focus

- Learning about and identifying industrial activities that may impact wetlands and waterfowl
 - Roads
 - Pipelines
 - Seismic lines
 - Well pads
 - Transmission lines
 - Forest harvesting
- Integrating wetland and waterfowl knowledge into new and existing planning and operational practices that are/can be used to avoid and minimize potential impacts
- Evaluate and promote use of BMPs



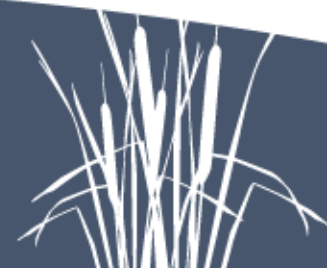


The BMP Program was developed to help industry's growing efforts to implement practices that support the responsible management of wetlands, waterfowl, and waterfowl habitat

BMP Program Goals

Work collaboratively to...

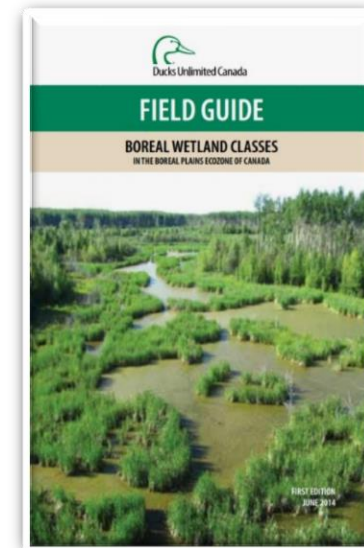
1. Identify and promote the use of BMPs
2. Act as a neutral broker and a conduit for information exchange
3. Provide industry access to practices recommended by a respected conservation organization



Raise awareness and understanding of boreal wetlands

- Wetlands training
- Wetland field guide
- Workshops, field tours, events
- Providing input into policies, guidelines, directives, certification standards, etc.
- Gaining a better understanding of activities with potential to impact

<http://boreal.ducks.ca/solutions/become-a-leader-in-wetland-stewardship/>



Develop communities of practice to share information about wetlands

- Wetland BMP Knowledge Exchange
 - Monthly newsletters, webinars, twitter and website
- Joint webinar series with the Canadian Institute of Forestry
 - *This landbase is not passive – connecting boreal wetlands to forest management*
- Exploring opportunities for Knowledge Portals – DUC, NRCan, ECCC, NAIT BRI, Alberta Innovates, and others
- Alberta NAWMP Wetlands Education Network
- Evergreen Centre for Learning and Innovation, Grande Prairie

@wetlandexchange



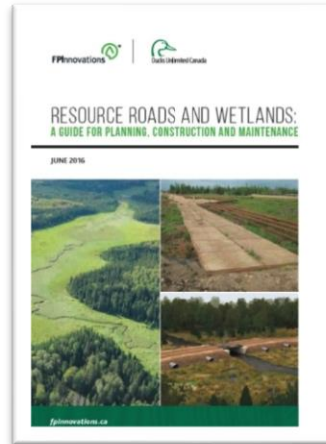
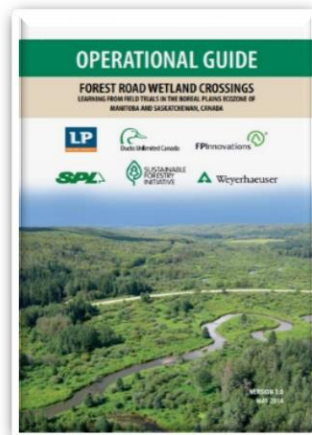
www.wetlandbmpexchange.com



WETLAND BMP
KNOWLEDGE EXCHANGE

Collaborating to address conservation challenges

- Forest Management and Wetland Stewardship Initiative
- Resource roads and Wetlands: A guide for planning, construction and maintenance (DUC & FPIInnovations)
- Operational Guide: Forest road wetland crossings (DUC, FPIInnovations, LP, SPL, Weyerhaeuser, and SFI)
- Government of Saskatchewan resource road wetland crossing and watercourse crossing guides (*in progress*)
- Company partnerships



Other conservation approaches

- Mapping wetlands
- Influencing wetland and conservation policies
- Influencing the establishment of protected areas
- Contributing to land-use planning processes
- Multi-criteria conservation planning
- Boreal wetlands, waterfowl, and ecosystem services research



Evergreen Learning and Innovation Centre





About the Evergreen Centre

[The Evergreen Centre for Resource Excellence and Innovation \(the Centre\)](#)

- Developed as a collaborative effort between industry, community, and government
- Provides a place to co-create, demonstrate, and educate students, stakeholders and the general public
- Focus on innovative solutions for natural resource based challenges and best management practices (BMPs)



5 minute drive
to Grande
Prairie

ENRTEC

Challenges

- Increasingly difficult to gain and sustain social acceptance for resource development projects. Linked to challenges building and maintaining trust between industry and stakeholders.
- Knowledge gaps between stakeholders. The industry is unclear of expectations and desired outcomes of regulatory policies.
- Fear of failure resulting in a culture of compliance to regulations creating a barrier to innovation.
- Limited channels of communication for open communication, feedback, and discussion.
- Environmental liabilities continue to grow with restoration and remediation taking precedence over conservation.

History of the Centre

- Developed in **2009**, the Evergreen Park donated the use of their land for research, testing, demonstration/extension, and education.
 - Local government (AEP), oil and gas industry, and forestry staff played a leadership role in planning and developing the Centre.
 - The Centre created opportunities for local businesses, for example Risley Equipment's new technology demonstrated at the site was used in Devon Canada's Jackfish II Interconnecting Pipeline Project.
- **2010** added two major demonstrations 1. area demonstrating an innovative road solution in a wetland and 2. area demonstrating three different applications and rates of coarse woody debris.
- **2011** partnered with the Government of Alberta, Grande Prairie Regional College and the Oil Sands Leadership Initiative (Conoco Phillips Canada, Nexen, Statoil, Suncor Energy) on a winter tree planting experiment.

History of the Centre

- **2012** won the Alberta Emerald Foundation Emerald Award in the community category.
- **2014** partnered with Inside Education to deliver youth education programs at the Centre.
- **2016** added an evolution of seismic line demonstration.
- **2016** the Evergreen Learning and Innovation Society (ELIS) was created.



Strategic Purpose

VISION:

Inspire a culture for responsible resource development through learning and innovation.

MISSION:

Provide a trustworthy environment for resource partners to exchange new ideas, communicate expectations, learn from others, and inspire innovative resource solutions.

VALUES:

- Trust and Respect
- Transparency
- Learning
- Inclusivity & Collaboration

Purpose

- Provide location to develop, test and demonstrate practices that promote responsible resource development and associated BMPs
- Build trust among stakeholders by enhancing communication and collaboration
- Inspire innovation and information sharing
- Support BMP research
- Educate and train
- Support environmental policy
- Lead environmental conservation

Wetland in Alberta

When we think of wetlands, many of us may picture cattails and ponds. However, the term 'wetland' includes many more types of ecosystems.



What is a Wetland

In Alberta, wetlands are generally defined as areas where the land is saturated with water long enough to have poorly drained soils, water-loving plants and biological processes associated to wet areas.



Class



Image

Alberta Wetland Classification

Alberta considers five classes

Wetlands:



Core Competencies



Partnerships and Stakeholders

- First Nations, three levels of government, corporations, industry/industry associations, students, not-for-profit organizations, and academic institutions
- Some of the early partners at the Centre include:
 - Evergreen Park
 - Local oil and gas and forestry (e.g., OSLI)
 - Global Restoration
 - FPIInnovations (a DUC partner)
 - Paradox Access Solutions
 - Triple G Construction, Kerik Brothers, and Risley Equipment
 - Derek Taylor Public School and the Junior Forest Rangers
 - Grande Prairie College
 - Inside Education





Environmental Monitors from Kelly Lake Cree Nation Photo credit Evergreen

Visitors to the Centre

- 2,000 visitors annually
- Includes industry workers, local urban residents, rural landowners, First Nations communities, municipal and provincial staff, forestry consultants, senior corporate leaders, environmental groups, university researchers, political leaders, recreation enthusiasts, school children, youth and parents

Demonstrations at the Centre

Currently over 40 demonstrations including

- Innovative pipeline strategies
- Innovative road solutions
- Innovative water crossings
- Caribou habitat restoration research
- Wood fibre roads
- Low impact reclamation
- Oil sands demonstrations
- Linear deactivation
- Low impact seismic
- Wetland restoration
- Live demonstrations



Demonstrations at the Centre



Restored well pad on a wetland



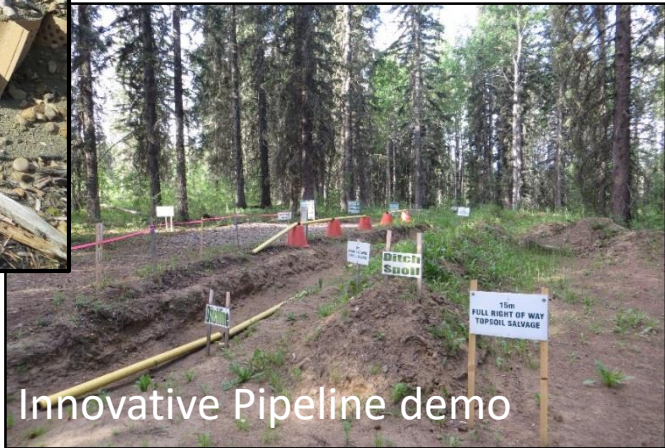
Low-impact multiple seismic line through a wetland



Wetland road geogrid



Innovative watercourse crossing



Innovative Pipeline demo

Wetland Centre Project



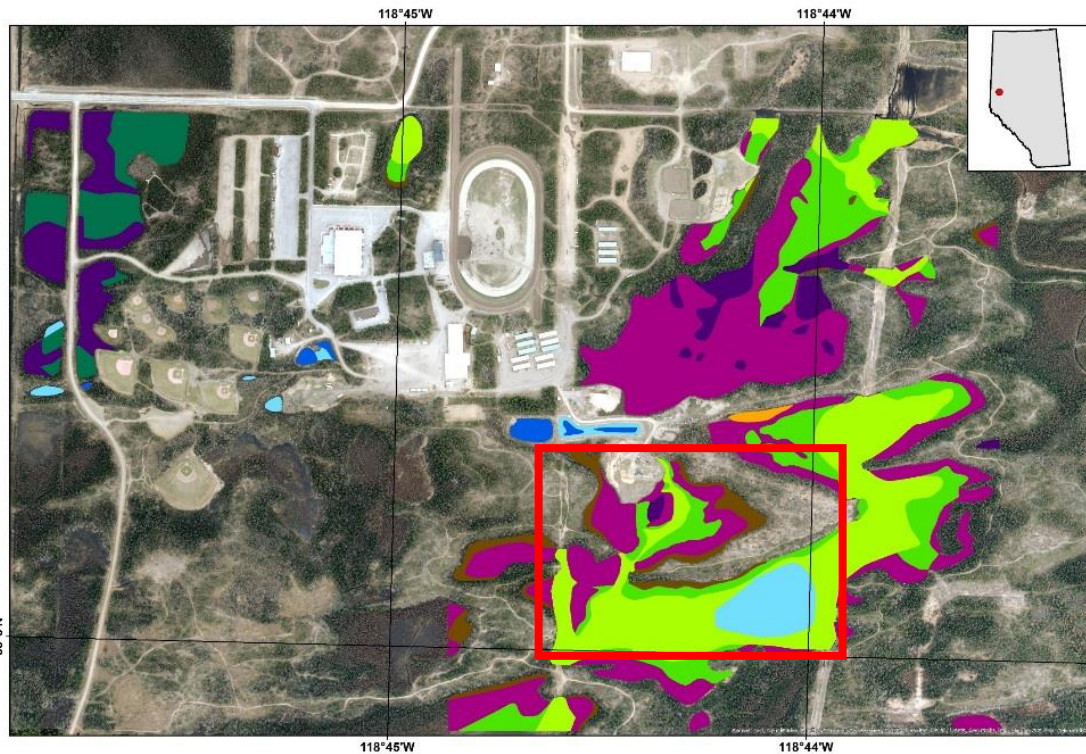
DUC and ELIS

DUC and ELIS have a number of shared goals

- Develop innovative solutions for effective sustainable land use
- Conserve, restore and manage habitat to sustain healthy ecosystems
- Collaborate and partner for environmental stewardship
- Science-based decision making
- Delivery of extension, communication and education programs and activities that promote conservation

In 2016 DUC & ELIS started discussing the potential of expanding the current Evergreen site to develop a Wetland Centre.

Wetland Centre at Evergreen Park



Boreal Wetland Training and Demonstration Centre

Started developing the concept of a Wetland Centre:

- First Wetland Centre for training and demonstration in the boreal
- Exceptional resource for boreal education, training, and outreach.
- A focal point to inspire and co-create wetland conservation with industry, government, NGOs, academia, and the public.



Project Overview

ELIS received funding through a Provincial Court of Alberta sentencing order to establish a Wetland Centre at Evergreen Park.

This will be accomplished through three project phases by summer 2021:

- Phase 1 – planning for a Sustainable Wetland Centre
- Phase 2 – building support and infrastructure
- Phase 3 – implementing planned activities

After the break, Angie will talk more about the Wetland Centre project.

