

The background of the slide is a photograph of a natural landscape. In the foreground, there is a field of tall, dark grasses. In the middle ground, a calm body of water stretches across the frame. In the background, there are rolling hills or low mountains under a sky filled with soft, grey clouds. The overall tone is serene and natural.

Doing it Right:
Using Ecological Principles to Select
Appropriate Techniques & Equipment
for Grassland Reclamation

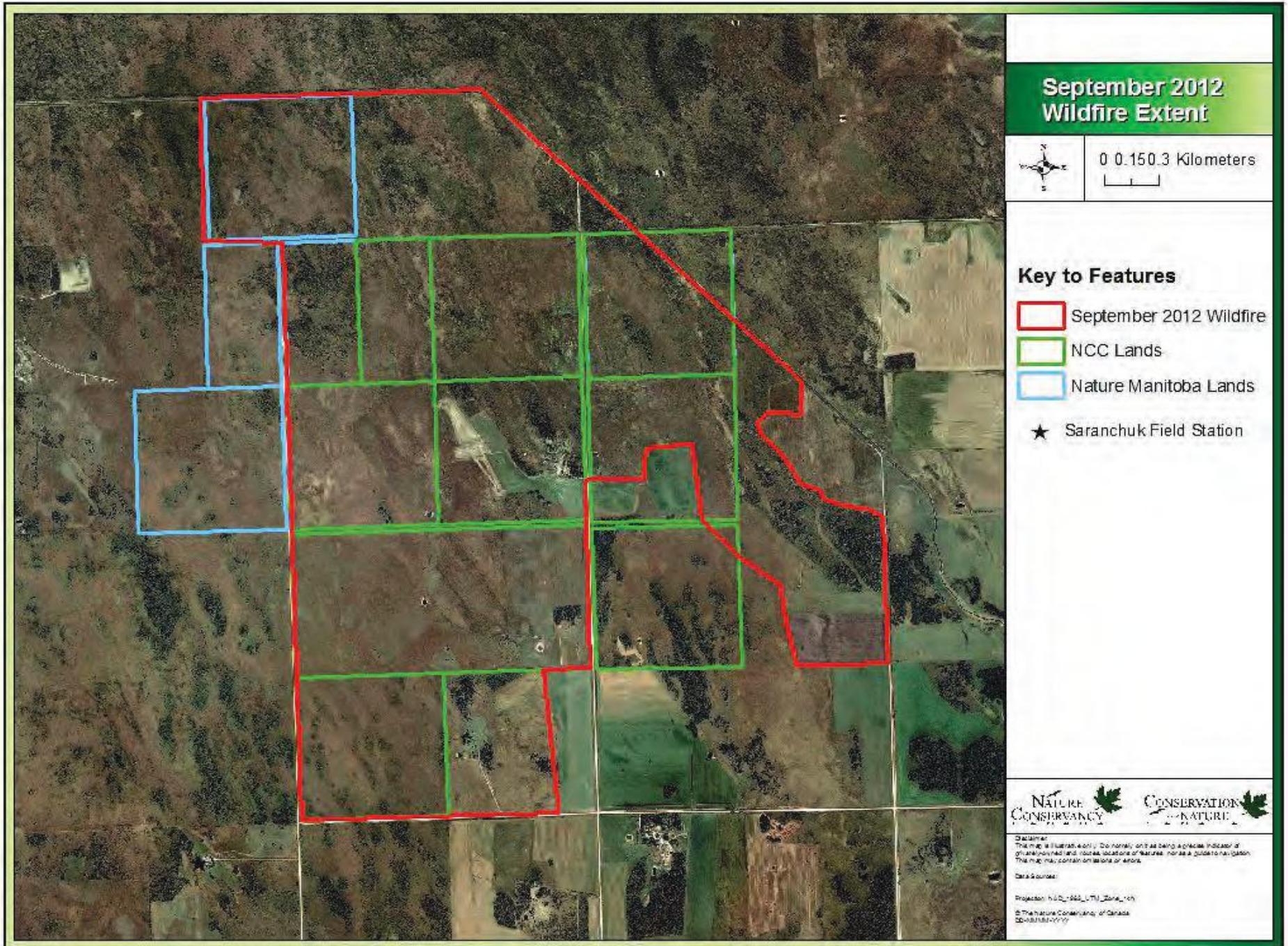
*By John P. Morgan
Prairie Habitats Inc. Argyle, MB*

&

*Steven Tannas
Tannas Conservation Services Inc. Cremona, AB*







September 2012 Wildfire Extent

	0 0.150.3 Kilometers
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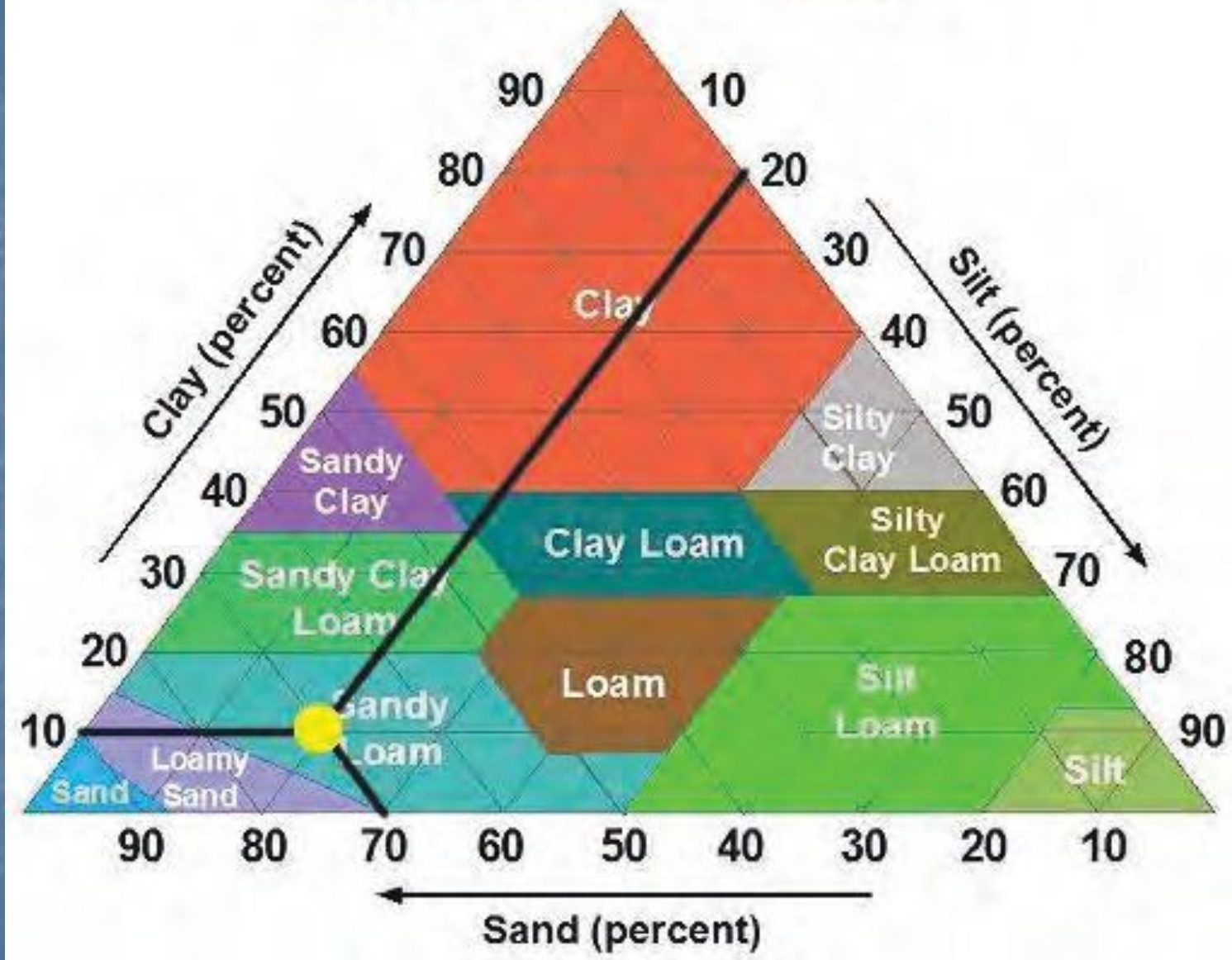
- Key to Features**
- September 2012 Wildfire
 - NCC Lands
 - Nature Manitoba Lands
 - ★ Saranchuk Field Station



Disclaimer:
This map is for informational purposes only. It is not intended to be used as a precise indicator of geographical features and should not be used for navigation.
The map may contain omissions or errors.

Data sources:
Projection: NAD 83, UTM Zone 18N
© The Nature Conservancy of Canada
2012/05/07/17

SOIL TEXTURE PYRAMID





Wikimedia Commons USFWS





www.sgs.ca





**Site Preparation:
*The Most Important Step!***





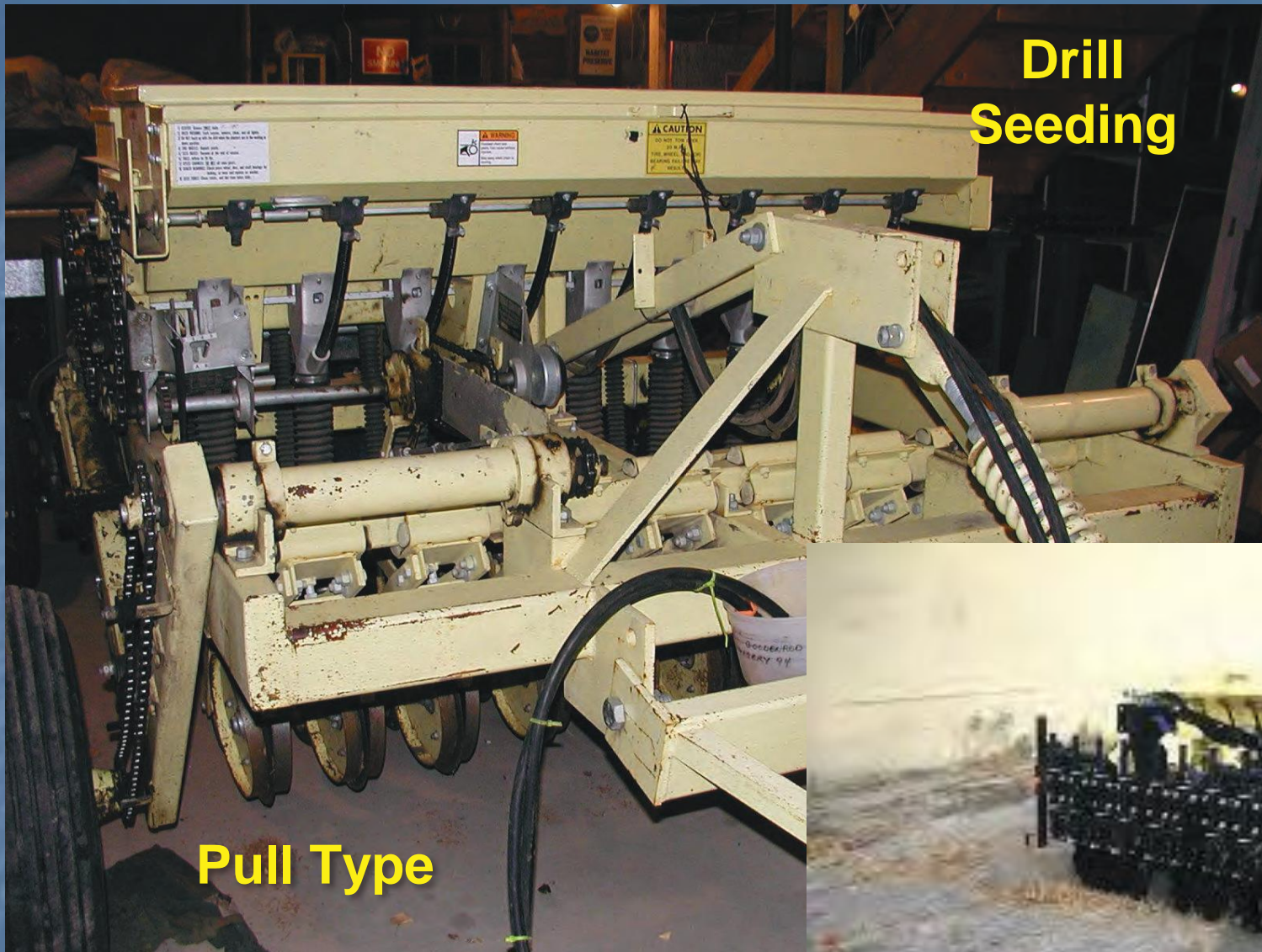
Broadcast Seeding







Drill Seeding



Pull Type



Skid Steer







www.weather.gov/safety/thunderstorm

Hydro Seeding/Mulching

- Hydro mulch can suppress plant growth if seed is incorporated into the soil below the mulch
- Suppression of growth through light reduction and reflection often reduces soil temperature
- Germination within a mulch can dry out seed or fail to root into the soil effectively especially in slow growing native species



Where *TO* Use Hydro Mulches For Native Species:

- Steep slopes where there is significant risk of erosion
- Along river banks or ditches
- where high water flows expected
- Where wind erosion is severe
- In poor soils where other soil amendments are added that need protection

Where *NOT* to Use Hydro Mulches For Native Species:

- Level areas
- Most slopes unless severe erosion risk
- Most upland areas



Erosion Control Matting

- Use instead of hydro mulching
- Only where severe erosion risk occurs
- Establishment suppression is possible
- Thicker weave = poorer native seed germination

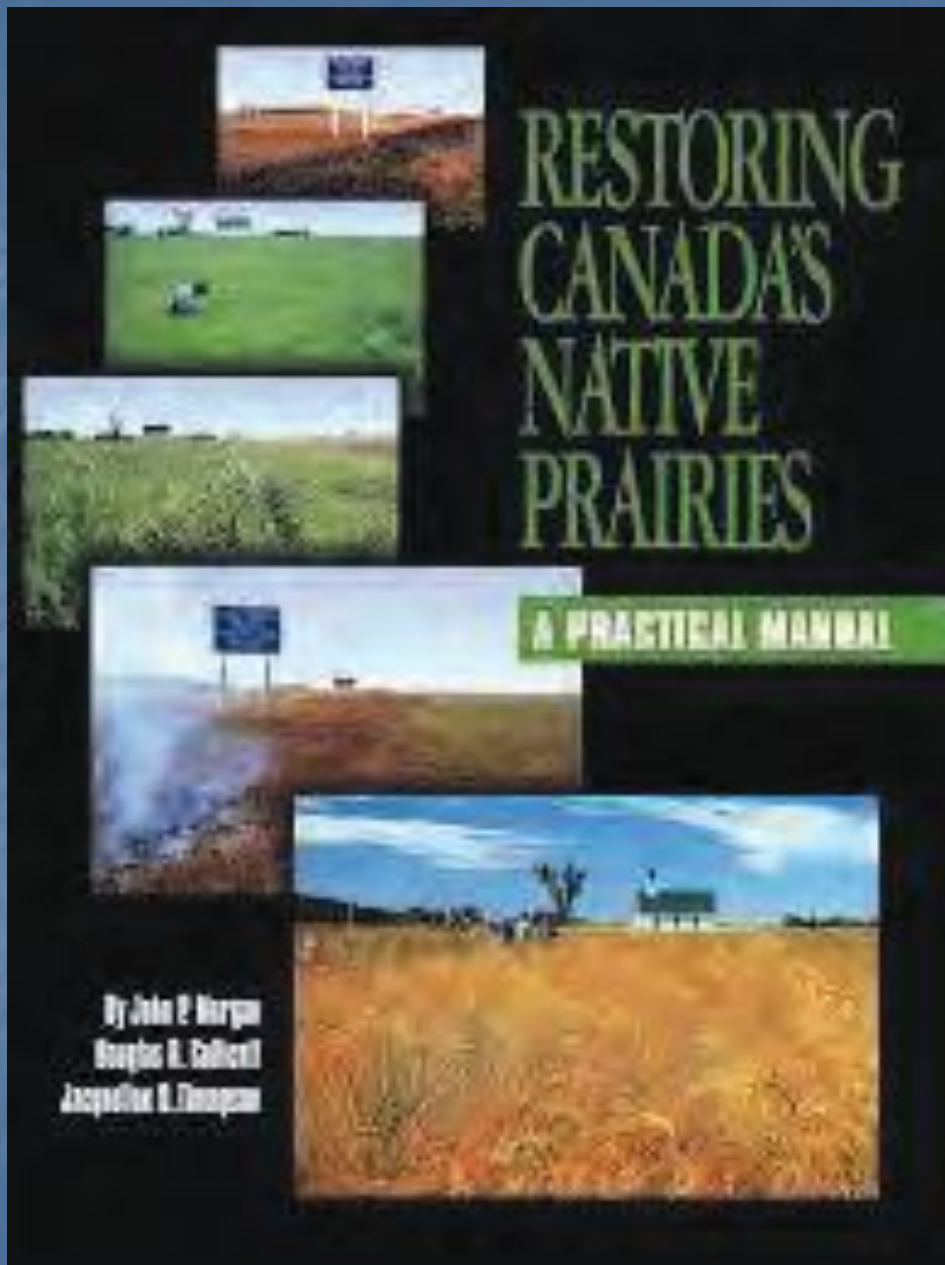
Photograph Site Chronology

Bio-degradable Erosion Control



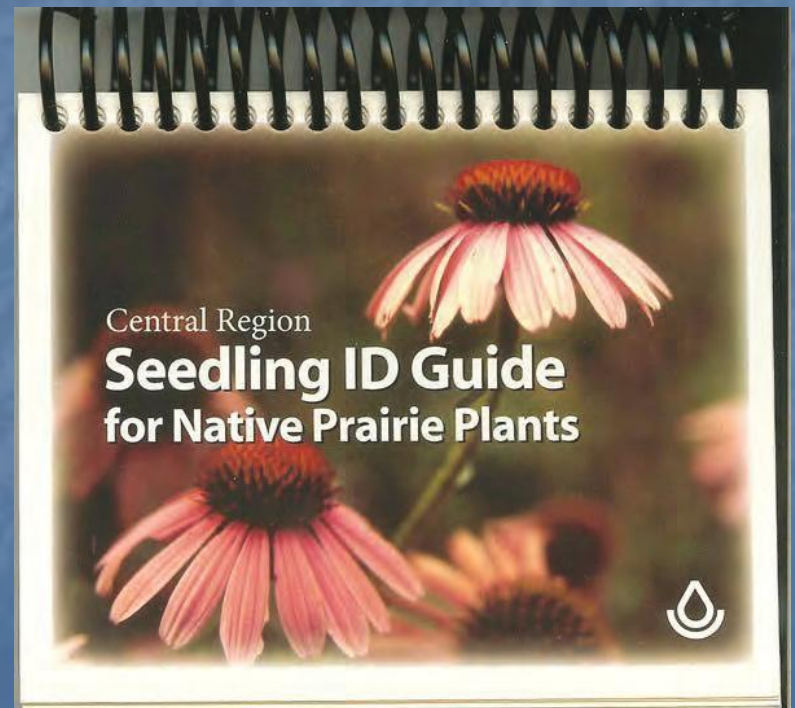
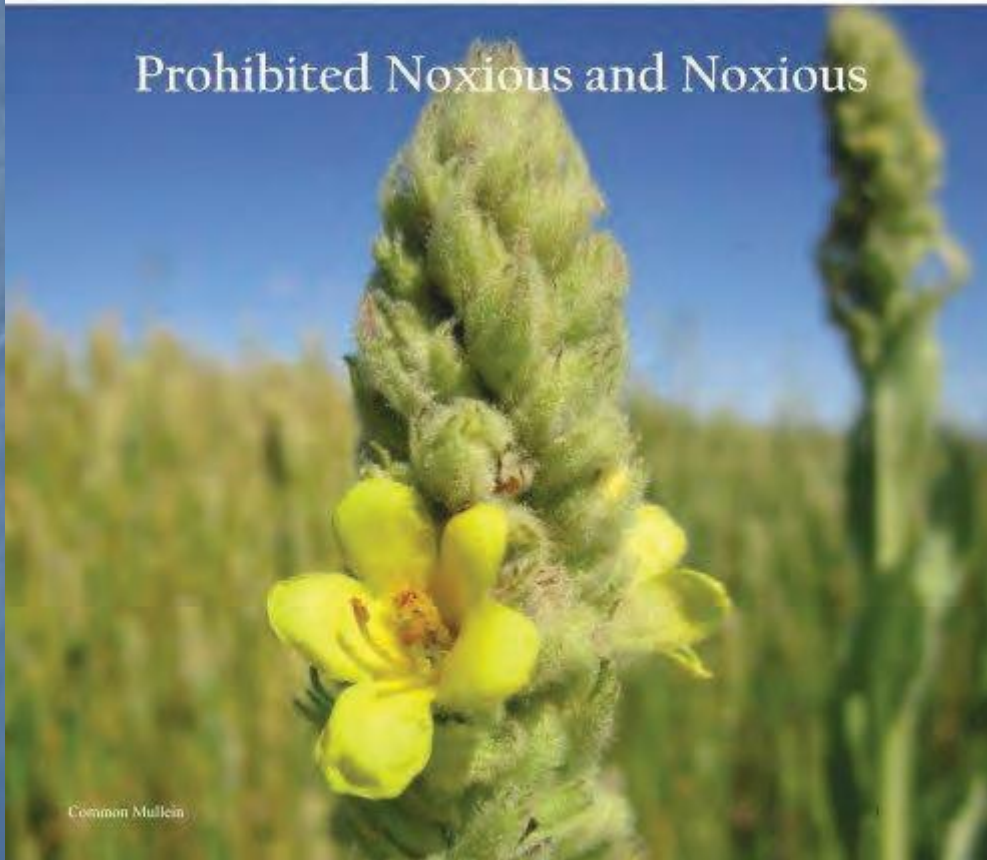
Post-Seeding Site Monitoring

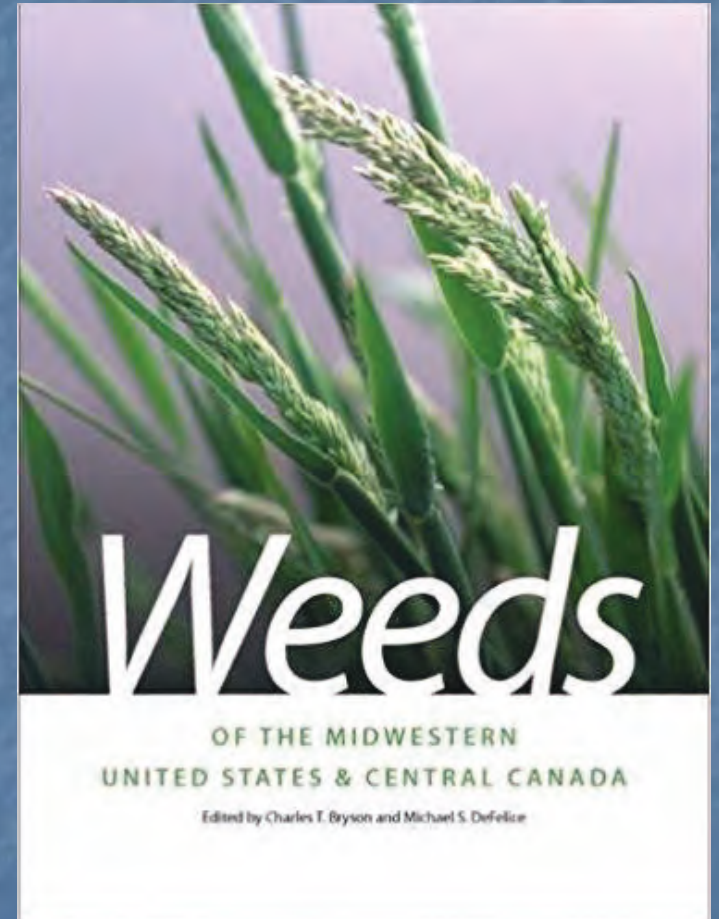
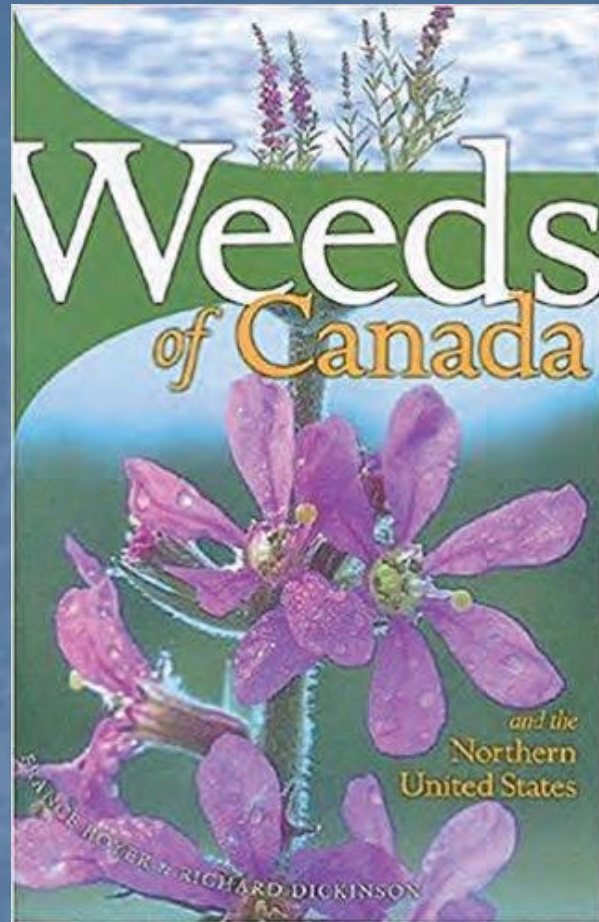
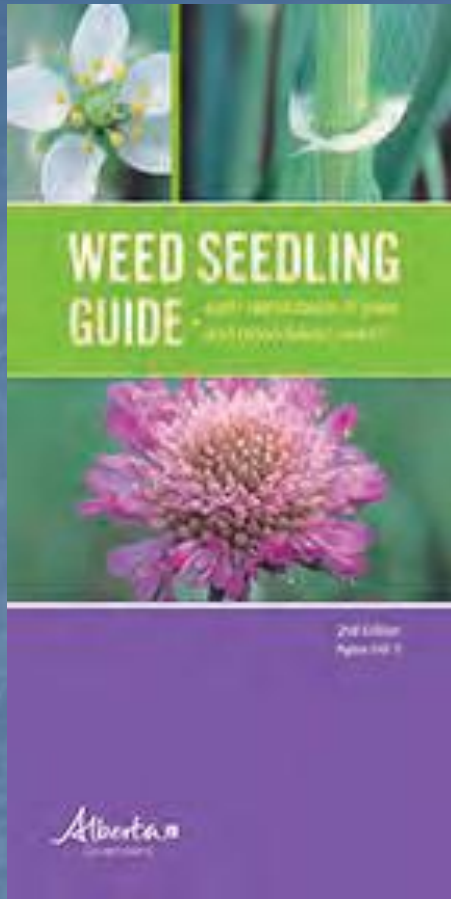




Alberta Invasive Plant Identification **GUIDE**

Prohibited Noxious and Noxious







*Enbridge Inc.
Oak Lake MB*







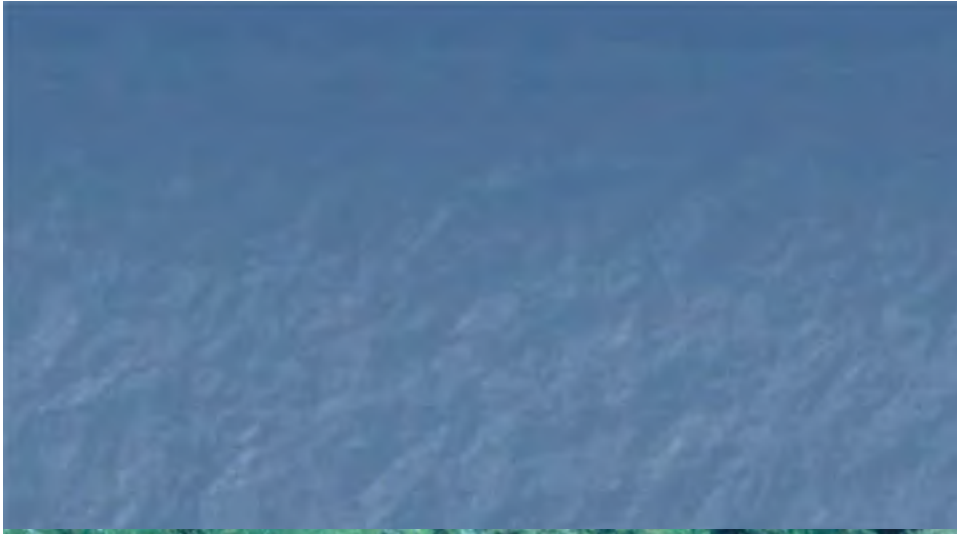




**The Forks Tall Grass Prairie
Reclamation
Winnipeg, MB
Year 1 - 1989**

**The Forks
planters**



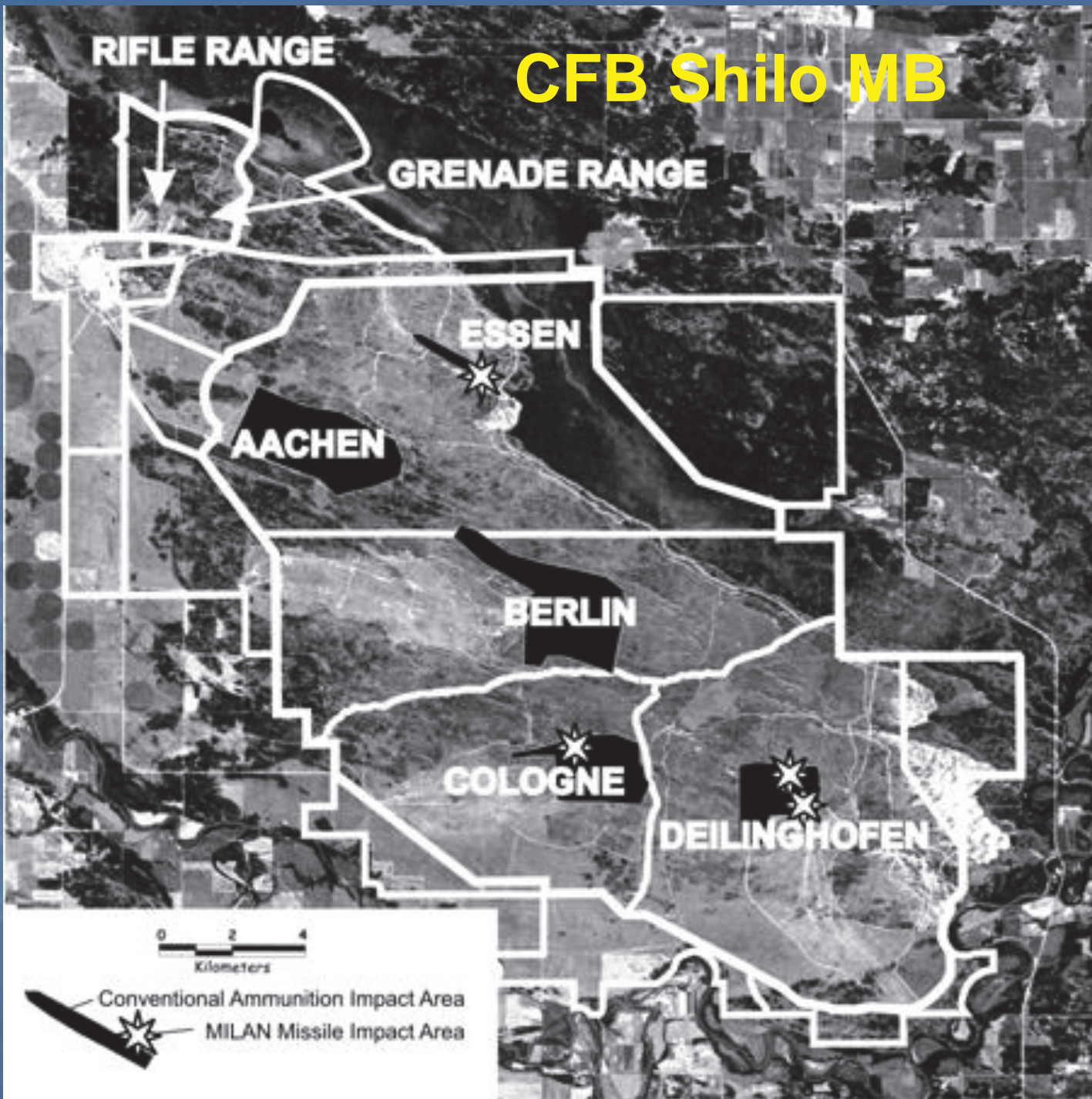






**The Forks
Winnipeg, MB
2019
30 Years Later**

CFB Shilo MB



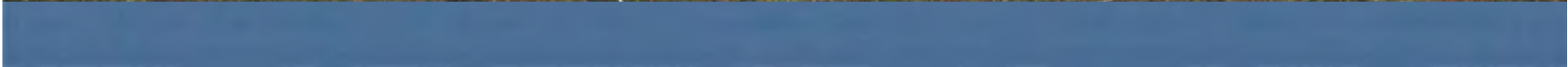
Home of the 1st RCHA Regiment



**& Germany Army Tank
Corps 1975-2001**







**Alberta Conservation Association
Sage Grouse Habitat Restoration
Manyberries, AB**



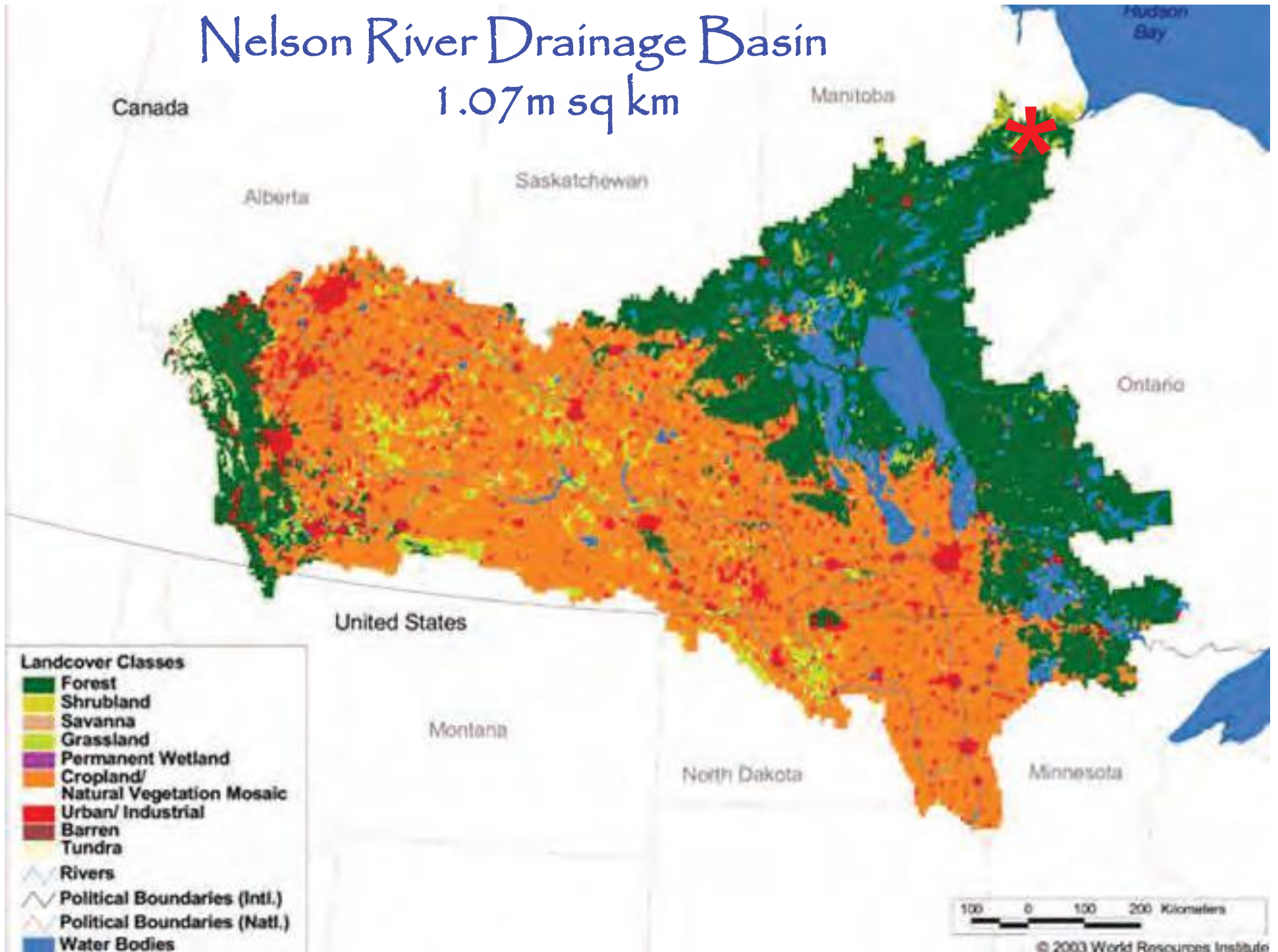


Manitoba Hydro Keewatinohk Hydro-Electric Converter Station Nelson River, MB



Nelson River Drainage Basin

1.07m sq km









Mealy
Primrose
*Primula
incana*



Labrador Tea
Ledum groenlandicum



Northern Bog Laurel
Kalmia polifolia



Tall Lungwort
*Mertensia
paniculata*

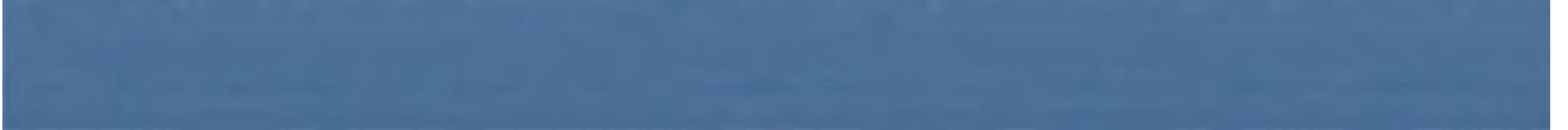
Marsh Reed Grass

Calamagrostis canadensis



Rocky Mountain Fescue
Festuca saximontana









REED GRASS

**AWNED
WHEATGRASS**

**FORB
MIX**

**ANEMONE
MEADOW RUE**

2016/10/6 11:14



















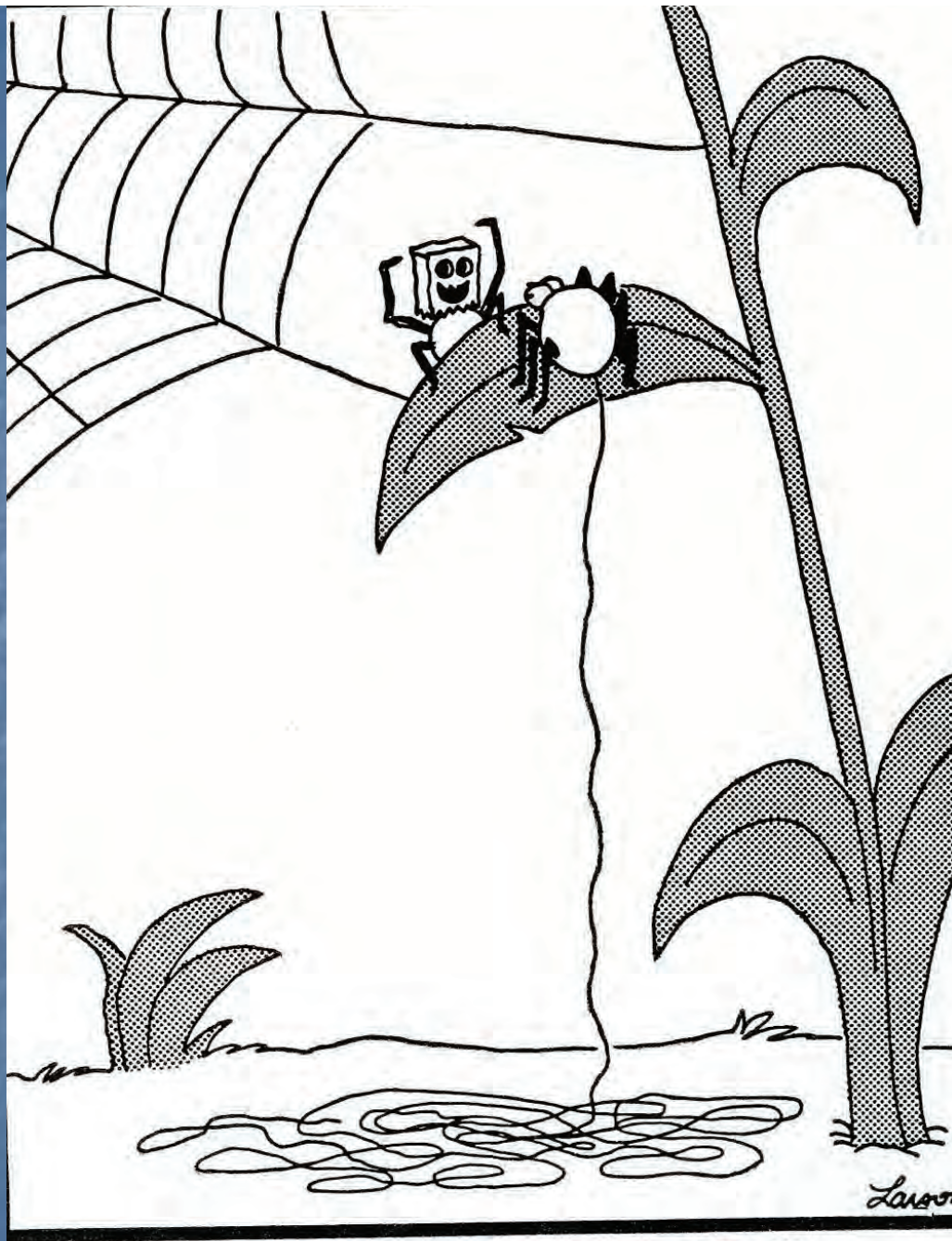






“You’re right, Bill.
Guess we ‘d better
call John & Steven.....”

“You know ~ I think we’re going
a bit too deep with this native
grass seed thing, Dave”



“Hey, Bob...did I scare you or what?”



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