### CFGA Carbon Offset Development Pilot Project

Background and Overview



### The Pilot Project

Two year pilot project targeting 5,000 hectares of grassland across Canada

**Objectives:** 

- Test and refine the CAR Canada Grassland Project protocol
- Learn as a group how to effectively develop projects
- Discover options for cost-saving and streamlining:
  - Remote sensing
  - Alignment with other programs (e.g. EcoGift)
  - Discover least-cost ways of meeting the protocol's requirements (e.g. Land Appraisal)
- Develop a framework for extension across Canada
- Proof of concept to help approval of Alberta Grassland Protocol and Environment Canada and Climate Change priority protocol



### Partners









Agriculture and Agri-Food Canada



SALTS southern alberta land trust society





Saskatchewan STOCKGROWERS Association







### Eligibility and Additionality Assessment

- Grassland for **10 years** with no current legal
   protection
- Financially viable for

crop production:

- (Land Appraisal)

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• Land must be suitable



project size: ~ 1



### Requirements

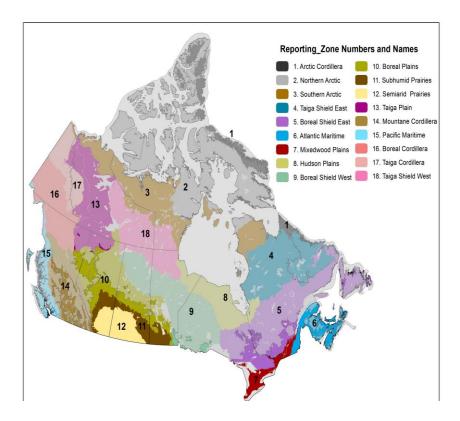
- Signing of a Qualified Land
   Conservation Agreement:
   Easement, Agreement,
  - Servitude or Covenant
    - No breaking of ground
    - Moderate Grazing is allowed

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# **Reporting Zones Map**

- Three steps to identify strata:
  - 1. Geography & climate (Reporting Zones)
  - 2. Soil texture (using government soil survey data)
    - Coarse
    - Medium
    - Fine
- 1. Zone 5: Boreal Shield East
- 2. Zone 6: Atlantic Maritime
- 3. Zone 7: Mixedwood Plains
- 4. Zone 9: Boreal Shield West
- 5. Zone 10: Boreal Plains
- 6. Zone 11: Subhumid Prairies
- 7. Zone 12: Semiarid Prairies
- 8. Zone 14: Mountane Cordillera
- 9. Zone 15: Pacific Maritime



### Potential Annual Offset Generation for Reporting Zones 11 and 12

						80,00	
	Acres	160	800	1,600	16,000	0	
	Soil	il Potential Offset Credits Generated					
<b>Reporting Zone</b>	Texture	per Year (tCO <sub>2</sub> e/yr)					
11 - Subhumid						24,60	
Prairies	Coarse	49	246	492	4,921	5	
11 - Subhumid						33,67	
Prairies	Medium	67	337	673	6,734	1	
11 - Subhumid						32,05	
Prairies	Fine	64	321	641	6,410	2	
12 - Semi-arid						21,69	
Prairies	Coarse	43	217	434	4,338	2	
12 - Semi-arid						31,08	
Prairies	Medium	62	311	622	6 2 1 6	1	

### CAR Protocol: Testing how to Streamline and Gain Efficiencies

#### 1. Protocol adaptations

- 1. Legal language
- 2. Thresholds: Cropland physical and financial suitability, reversal risk

#### 2. Evidence and Contract Requirements

- 1. Land Appraisals
- 2. Historical and current land use
- Qualified Land Conservation Agreement

   legal terms and requirements, value,
   timeframe
- Project Implementation Agreement between CAR and Project Owner for ongoing monitoring

### 3. Monitoring

- 1. Remote sensing options:
  - i. Rangeland Decisions Support System - Low-cost, low-touch
  - ii. Shell Technologies
- 2. Alignment with ongoing easement monitoring
- 3. Rangeland health assessment streamlining



# **Project Setup and Streamlining**

#### **1.** Offset Generation Cost/Benefit Analyses

- 1. The most beneficial/feasible project types for all parties: land trusts, landowners, offset buyers
- 2. Aggregated/Cooperative projects
- 3. Verification options: site visit
- 4. Short vs long-term permanence (tonne-tonne vs. tonne-year)

#### 2. Team and Financial Setup

- 1. Testing of most efficient roles and responsibilities
- 2. Responsibilities for project costs
- 3. Setup of financial systems to enable project development
- 4. Purchase agreements
- 5. Ongoing monitoring costs
- 6. Contractual requirements



## Alberta Protocol: Activities and Research

#### **Eligibility and Evidence**

First Nations Land Ownership

Public Lands Eligibility

Land use evidence options

Irrigation legal and physical availability

Reduction Modifiers/Coefficients: Grazing management plans, grassland burning

#### **Permanence and Enforcement**

Project Implementation Agreement

Options/requirements for permanence

#### **Approval Process**

Advocacy

Coordination of TWG

Develop Technical Seed

#### Thresholds

Cropland Premium: Land Appraisal requirements/streamlining

Conversion Risk Thresholds

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#### Document

Technical Review

**Public Comments** 

Draft Protocol

# Benefits to Joining the Pilot

- Opportunity to generate (approx.) 0.25-0.5 carbon offsets per acre per year for up to 30 years.
- Help shape how this opportunity is developed
- Significant assistance in developing the project.
- Many upfront costs paid or partly paid.
- Honorarium for participation.
- Learning for all partners.



## Next Steps

- Pilot Project:
  - Test Protocol implementation
  - Develop contractual requirements
  - Develop real projects and carbon offsets
- Develop Alberta Protocol:
  - Intent to Develop submitted December 2018
  - Now stalled due to change in government priorities
  - Advocacy to begin this Fall
  - Protocol drafting to begin this Fall with AB NAWMP funding
  - More funding will be required to complete the full approval process