

BC Ministry of Agriculture and Food By Greg Rekken Team Lead, Mitigation and Soil Health





## S-CAP Climate Change and Environment

#### **Priorities:**

- Tackling climate change and environmental protection to support GHG emission reductions and long-term vitality of the sector
- Positioning producers and processors to seize economic opportunities from evolving consumer demands



Reducing net GHG emissions

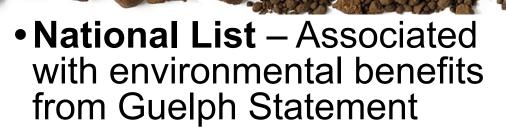


Adapting to climate change



**Environmental sustainability** 

### S-CAP: BMP Lists



- Priority BMPs best emission factors
- Resilient Agricultural Landscapes Program (RALP) – BMPs providing eco. goods & services; limited direct farmer benefit



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Priority BMPs
41

RALP BMPs
25

National BMP List

140

Soil Health

Related BMPs

35

### S-CAP National BMP List



- Master list of beneficial management practices derived through federal, provincial, & territorial consultations
- Broadly worded for flexible implementation multiple specific practices may fit under a single bmp
- Aligned with environmental benefits from Guelph Statement
- Basic Reporting Requirements
- Research opportunities: identify & develop new bmps for inclusion on the list



## S-CAP: Priority BMPs

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- Sub-set of the national BMP list with best emission factors
- These bmps will be used by AAFC to estimate GHG reductions (National Target: 3-5 MT CO<sub>2</sub>e)
- Additional reporting on adoption rates likely through EFP/BMP
   & other cost-share programs
- Research opportunities: validating bmps & refining emission factors for B.C.
- Opportunities for adding more bmps to the priority list.

## S-CAP: Resilient Agricultural Landscapes Program



A \$250 million FPT cost-shared program as part of the SCAP, the Resilient Agricultural Landscape Program will support carbon sequestration, adaptation, and address other environmental co-benefits

#### **Delivery Approach**

- EG&S incentive payment approach (e.g. per acre payments and land use agreements.
- Existing program reference: Farmland Advantage, Delta Farmland & Wildlife Trust
- Regional flexibility to determine details

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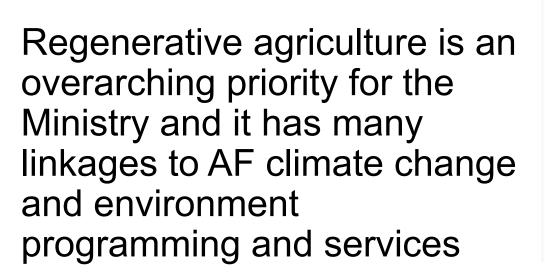
#### **Targeted Land Use and Actions**

- Maintaining and restoring grasslands and wetlands
- Enhancing riparian and on-farm wildlife areas
- Other regionally relevant agriculture practices

#### **Expected Outcomes**

- GHG reductions of 2.7Mt per year
- Improved soil health
- Increased conservation and restoration of critical wildlife habitat
- Strengthened resilience of agricultural lands
- Improved water quality

### Regenerative Agriculture, Climate Change and the Environment









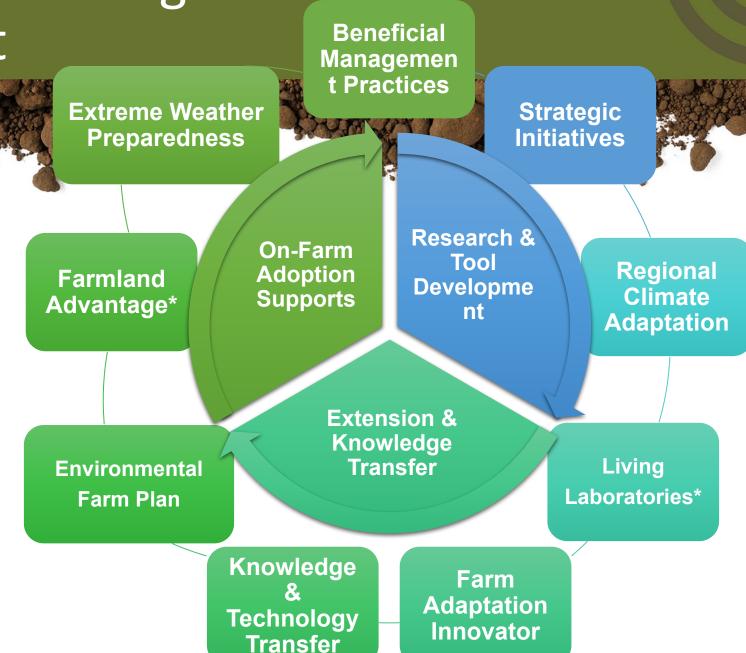


# Existing Climate Change & Environment

## Programs

The Ministry currently supports and delivers a wide range of programs that promote:

- Research and Tool development
- Extension & Knowledge
   Transfer
- On-farm adoption supports



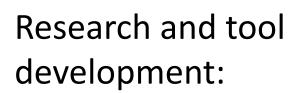
Climate Change & Environment Programs

Research and Data needs for on-farm adoption supports:

- Evolution of climate change adaptation and mitigation practices
- Regional & sector BMP adaptation



## Climate Change & Environment Programs



- Decision aids: nutrient management calculator
- Technology and knowledge transfer
- Supports successful adoption of bmps



## Expanding our Regional Extension Delivery Model

- Include a focus on climate mitigation, environmental sustainability, regenerative agriculture (i.e. not just on climate change adaptation)
- Increased producer participation in regional prioritization and decision making
- Shift towards producer centric applied research and extension services (e.g., on-farm demonstration and practical tool development)
- Improved external communication on climate change and environmental opportunities





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Balancing regional priorities with strategic & provincial priorities (ie. Emissions reductions, nutrient management, water conservation)

Applied Research / On-farm demonstrations:

- Similarities with Living Labs,
- Flexible, expansive and situationally driven
- Ground-truthing strategic initiatives (ie. Cover cropping)
- Seeing is believing: extension, learning and knowledge transfer

# Potential for Using Regional Extension Model for Data Collection and Reporting

- Standard set of before/after soil metrics applied to all research and demonstration projects having impacts on soil
  - Establishing regional soil health baselines
  - Measuring bmp x region x production system interactions
  - Refined emission factors and abatement costs
  - Prioritization: Targeting bmps to where they have the greatest outcomes.
- Idea: Soil Health Road Show Coming to a field day near you
  - Technology and knowledge transfer
  - Building farm partners for baselining and monitoring



## More White Space

