APAS Submission to the Consultation on the Saskatchewan Climate Change Strategy March 20, 2018

Introduction

The Agricultural Producers Association of Saskatchewan is Saskatchewan's general farm organization and serves as the voice of thousands of farmers and ranchers in our Province. As the stewards of 40 % of Canada's cultivated land and 35% of Canada's pasture land, our producers are key players in Canada's land use and carbon cycle management. Our members face increasing challenges from climate change impacts and face considerable economic pressures from any potential carbon pricing scheme.

APAS appreciates the opportunity to provide input into the Saskatchewan Climate Change Strategy, its objectives, and implementation. We also offer a number of specific policy recommendations on carbon offset design, and Ministry specific actions that would support the overall Plan.

Following the release of the Strategy in December 2017, APAS issued a statement endorsing the Plan's principles as they relate to climate change mitigation and adaptation in the agricultural sector. In particular, APAS supported the creation of a voluntary offset system to recognize agricultural carbon management, and the commitment towards developing policies and programs that will assist the agricultural industry to adapt and build climate resilience in rural communities.

APAS has been actively involved in the public discussion of carbon management and climate change policy. Submissions have been filed with Federal Government concerning the Carbon Backstop legislation and to the Canadian Council of Ministers of Environment carbon offset policy process. In July of 2017, APAS held a Prairie Agricultural Carbon summit to discuss the various issues involved. (Copies of our submissions and Carbon Summit Report are attached.)

APAS has also been very active in policy discussions at the national level through our membership in the Canadian Federation of Agriculture.

Overall, we firmly believe that agriculture is a key part of the solution to the carbon problem.

At the signing of the Paris Climate agreement in 2015, it was recognized that if we could increase the sequestration of carbon in agricultural soils by 4 parts per thousand, the world's farmers would be able to halt the increase in CO2 in our atmosphere.

The Prairie Resilience: A Made-in-Saskatchewan Climate Change Strategy, recognizes agriculture in Saskatchewan is a global leader in low-emissions practices. Furthermore, the strategy recognizes our soils are an important carbon sink, and that since the 1980s, agricultural producers have made advances in efficiency, technology and best practices that have increased the ability of our soils to sequester carbon.

Carbon sequestration in our soils provides a unique economic and environmental opportunity for our Province to benefit from supporting on-farm innovative schemes and research aimed at storing additional carbon in our soils.

APAS supports ongoing research initiatives within Saskatchewan and elsewhere that will continue to develop a clearer understanding about the full range of carbon capture and storage opportunities on agricultural lands.

APAS understands that research is a fundamental aspect of decision-making for government to establish thorough policies, but incomplete data should not prohibit moving forward based on our current understanding of the value of agricultural lands as a means to sequester additional carbon.

The following are our comments on some of the questions posed by the consultation, and we have also included more detailed recommendations for the government's consideration.

Topic #2 Non-Regulated Sector Questions

• Feedback on the overall effectiveness and flexibility of the approach for the non-regulated sectors (including small to mid-sized industry, transportation, homes and buildings, agriculture and more.)

Response:

- Saskatchewan must build on our history of innovation in agriculture to enhance our current successes in managing carbon and developing new technologies
- We need bold thinking. In order to maximize the benefits of new technologies and management practices, policy design will have to be forward thinking and flexible and avoid administrative hurdles to innovation and adoption.
- Governments need to move faster on developing the science and policy framework around maintenance and enhancement of existing carbon sinks on agricultural lands, such as grasslands, wetlands, and forested areas
- Governments must invest in incentives for producers to invest in clean technology and practices, such as accelerated capital cost allowances, rebates, grants, and cost-shared funding;
- Recognition from governments that the agricultural sector is unique and

requires an approach to climate action that is different than other sectors in order to be effective;

- Governments must recognize that agricultural producers are stewards of carbon stocks and develop programs to incentivize their best management;
- The Province must recognize the increased carbon sequestration that has taken place with yield gains and new crop rotations.
- We need investment in programs that incentivize producers to make management decisions that maximize benefits and avoid emissions.
- Consideration in all relevant provincial government programming to assist the agricultural community in maximizing carbon and GHG management.

• Do you have any specific suggestions on how emission reductions can best be achieved in the non-regulated sector?

Response: APAS has attached a summary list of policy suggestions as to how agriculture can help manage GHG emissions, and how provincial policy can support their efforts. (Appendix 1)

• What should the crediting start date and baseline period for offsets in Saskatchewan?

Response: Government must consult widely with the Saskatchewan Soil Conservation Association and other researchers and producers on this topic. The development of offset design has stagnated in Canada due to poor understanding of the science and the changing dynamics of agricultural production. Saskatchewan can play a leading role in developing meaningful criteria for improved carbon offset design.

• Do what degree should the Ministry play a role to manage the supply and demand for offsets? Please provide any examples of what actions the Ministry should consider taking.

Response: Wherever possible, carbon offset policy needs to be flexible enough to deal with changing circumstances. It needs to be complementary so that producers in Saskatchewan can participate in offset markets nationally and internationally. More detailed explanation is offered in Appendix 1

• Should banking of offset credits be permitted? If yes, for how long?

Response: Offset design should be flexible enough to maximize the benefit to both producers, and the environmental objectives of the Strategy. Banking of offsets could assist with engaging producers in the program.

• Is there a role for aggregators to build offsets from smaller projects?

In the Alberta system, the presence of aggregators has seriously reduced the value of the program to the landowners. A credible offset program needs to provide a maximal share of the value of the offset to the business achieving the result, and not to intermediaries or administrators.

Topic #3 – Resiliency Framework

• Feedback on the overall effectiveness and flexibility of resiliency framework.

• What feedback do you have on the specific measures and models proposed in the resiliency framework?

APAS has not completed our assessment of the specific measures and models.

• How important is it to have an approach to resiliency as part of the province's overall climate change strategy?

Response: Given our recent experience with extreme weather events, the development of a resilience approach is essential for the sustainability of agriculture and rural communities.

• What should be the highest priority initiatives that are pursued in Saskatchewan to best contribute to our resiliency to climate change?

Response: Water management and supply is the number one agricultural concern. This includes resilience to flooding, drought and maintenance of water quality. Critical measures include the development of local capacity to plan and implement water management on a watershed basis. Continued innovation in research and the advancement of agricultural management practices are also required to maximize economic resilience.

• What opportunities do you see to collaborate with Indigenous people on resiliency to climate change?

Response: Indigenous communities play a vital role in water management at the local level.

• How best can the Government of Saskatchewan how engage citizens from across the province in resiliency to climate change?

Response: As with the development of the 25 Year Water Security Plan, the Government must take a lead role in the discussion and help develop an understanding of the benefits of building resilience. Government also has to develop governance models to allow communities to plan and implement local resilience measures.

Appendix 1: Offsets and Opportunities

(From the Canadian Federation of Agriculture Policy Statement on Climate Change Feb 2018)

Governments must include opportunities for producers to be appropriately recognized

for emissions reduction and carbon sequestration in climate policies. This requires additional investment in research into carbon sequestration of native pastures, tame forage crops, all other crops and their management practices, wetlands and forested lands across all soil types and landscapes. Government must include agricultural producers in the designs of programs in order to ensure relevancy and ease of use for producers in order to support strong participation rates. Agricultural producers have found it difficult to see value in offset protocols where they exist or are in development. This, in part, is due to the low rates of return that have been offered to date and the administrative burden of participation and verification. As a result, participation rates in offsets have stagnated, yet innumerable more producers are actually qualified for the offset through their current practices. As Canadian jurisdictions develop their own climate policies, programs must be designed to be more relevant to agricultural producers and to build upon successful incentive-based programs to drive practice change and investments.

In general, practice has demonstrated the effectiveness and efficiency in pursing incentive-based programs with the agricultural sector rather than through regulations. There are successful programs such as cost-shared funding that has been delivered through Environmental Farm Plans and Beneficial Management Plans (BMPs) that have driven targeted investments at the farm level. This program and others must receive additional investments and a review for most efficient actions that would reduce emissions or boost adaptation. An incentive-based approach would also take advantage of tax policies like accelerated capital cost depreciation for clean technology and design offset protocols with efficiency and the protocol user in mind.

One of the challenges for agricultural producers has been governments' focus on only supporting offset protocols and providing compensation for projects that strongly demonstrate additionality. Agricultural producers are inherently adaptable and are stewards of significant carbon stocks through best management practices such as zero and minimum tillage, shelterbelts, woodlots, wetlands, forages, and grasslands. However, economic pressures do not support maintaining these carbon stocks and without strong incentives to producers to manage them effectively, land-use based emissions will continue to occur. There is no business as usual for the agricultural sector in managing carbon stocks; variable product prices and changing consumer preferences can result in both significant land use changes and greenhouse gas emissions, as producers respond in order to remain financially viable.

In order to incentivize agricultural producers to take climate action, the following is recommended:

- Offset protocols, including voluntary offsets, must be designed in order to be workable and practical for agricultural producers with minimum administrative constraints to participation. This approach is required in order to incentivize participation and includes:
    - A transparent and meaningful partnership with agricultural producers to develop climate change policies and offset protocols;

- A broad range of offset protocols across all sectors and commodities.
- Allowing the aggregation of agricultural carbon offset projects;
- Stacking of credits;
- A fair price to the producer for their voluntary emissions reduction or sequestration;
- Recognition of the early investments and actions that producers have taken to address climate change;
- Effective and efficient verification of offset credits to minimize administrative costs;
- Recognition that there is no need for costly on-farm verification of every operation and adopt risk-based sampling for verification of credits;
- Utilization of measurable science and Beneficial Management Practices rather than impossible to prove permanency;
- Exploring the development of a buffer reserve with a risk premium to manage risk of reversals instead of proving permanency; and,
- Transparent and cost-effective administration of climate policy.
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(A) Recognition of carbon sinks

Saskatchewan agricultural producers should be recognized for their early investments and provision of climate related ecological goods and services.

APAS recommends the development of an incentive-based approach in support of producer led stewardship practices that actively store carbon and provide valuable ecological good and services and climate resiliency. Governments focus has generally favoured the support of offset protocols and provided compensation for projects that strongly demonstrate additionality. However, economic pressures do not adequately support maintaining best management practices such as zero and minimum tillage, shelterbelts, woodlots, wetlands, forages, and grasslands. Strong incentives given to producers to better manage their lands would maintain these carbon stocks, while providing climate resiliency as a means for reducing flood and drought risk.

Supporting agricultural best management practices should be considered for the environmental values provided in addition to the significant economic production from annual crops, forages, livestock, and other agricultural goods and services. Numerous conservation and land use services exist, designed to protect wetlands and other natural features by paying farmers and ranchers for the increased ecosystem services that they produce when they adopt agro-environmental beneficial management practices, restore, or preserve lands valued for their long-term environmental and economic benefits.

Based on the current state of knowledge, these programs have had a positive impact for participating landowners, and in return has provided a much-needed economic incentive

to encourage stewardship among producers. Targeting investments at the farm level with the use of such results-based conservation agreements should be recognized and be better funded by governments as part of an effective climate mitigation strategy.

Research on carbon sinks

Changes in cultivation practices and improved farming technology have received the most attention for reducing agricultural GHG emissions. More research is required on the carbon management benefits provided by natural landscape features on agricultural lands.

A much better understanding of sequestration in grasslands is urgently required.

In addition, research is also required looking specifically at determining how other uncultivated farmland (e.g., dugouts, sloughs, riparian vegetation, and shelter belts) might contribute as a carbon sink. Research at the University of Regina has found terrestrial and freshwater ecosystems contain natural carbon sinks that remove CO2 from the atmosphere and store it in vegetation, soils, and sediments for the long-term. An enhanced research program will be able to inform decision-making for agricultural lands and practices in uncultivated area and could reduce the economic impacts of mitigating GHG emissions.

Appendix 2: APAS recommendations for Provincial Ministry Actions in support of the Strategy

Ministry of Environment

The Ministry of Environment programs and policies will play an important role in determining the success of the Saskatchewan Climate Change Strategy. Not only as the Ministry responsible for the climate change policy and emission regulation, but as the Ministry responsible for Water Security Agency, habitat conservation, and other land use policies that impact producers' resilience to climate change.

1. *Water Security Agency 25-year plan*

The WSA 25 Year Water Security Plan contains many key actions to support resilience, and these need to be reviewed and included in the Climate Change Strategy

High priority actions include Watershed level planning, mapping, and modelling of basins and Water Management Regulation. The development of water storage and irrigation capacity will also be important considerations for the future resilience.

The future need for rehabilitation of existing water management infrastructure, such as the PFRA dam system needs to be considered.

The development of resilience at the community or watershed basis will require a review of governance and the roles of municipal governments, and entities that manage water such as Conservation and Development Authorities and Watershed Associations, together with community stewardship organizations.

Resilience measures will also require access to technical and design support for water projects, and the capacity of qualified persons to provide these services.

Ministry of Government Relations

Green Infrastructure – Federal / Provincial Initiatives

Potential exists for rural communities and agricultural landowners to develop local infrastructure to manage water. It is essential that the Province ensure there is an allocation of resources from the Federal Provincial Green Infrastructure available to rural projects that support resilience.

Ministry of Agriculture

There are many opportunities for the Ministry of Agriculture to provide leadership in areas related to business risk management, agricultural research, and the development and administration of offset assurance mechanisms.

Risk Management Review

Climate change is anticipated to have a profound impact on agricultural production in Saskatchewan. The changing climate increases exposure to environmental risks that are outside the control of primary producers, including flood and drought risks, increased disease pressure, and changes in the duration of our growing seasons. While a changing climate increases exposure to these environmental risks, it also creates opportunities for agricultural diversification into new commodities and product segments.

Effective and farm business risk management programs are essential to help producers both manage this exposure and have the confidence to make investments to take advantage of emerging opportunities.

The ongoing review of federal business risk management programs an important opportunity for producers and the Ministry to review current risk management programs from a climate risk perspective.

Declining enrolment in the income stabilization program, Agri-Stability, poses an unnecessary risk for the sector that needs to be addressed. Producers have lost faith in the Agri-Stability program as administrative compliance costs often exceed perceived benefit of the program. As the credibility of the program declines, it is more important

than ever to have effective and robust insurance programs that can respond to changing climate risks.

The BRM review is an opportunity for the Ministry to examine the continued utility of the Agri-Stability program, and to specifically look at redirecting its program funding to support the development of new margin and production insurance tools that are more responsive to producers' needs.

Promotion of best practices

The Ministry should put priority on promoting the adoption of best management practices that assist the goals of the Strategy. One example would be the 4R program developed by the Fertilizer Institute of Canada.

Agricultural Research

In July 2017, APAS hosted an Agricultural Carbon Summit that brought together producers, officials, and researchers to discuss agriculture's role in carbon management. Following the Summit producers adopted a number of research related recommendations to enhance carbon management in agricultural landscapes.

1.Increased financial support for the expansion of the Prairie Soil Carbon Balance Project to include Alberta and Manitoba sites, and expand the scope to reflect current crop rotations.

2. Work with the federal government and provincial crop commissions to invest in research programs for the development of crop varieties that would increase carbon sequestration through innovations such as enhanced root mass and increased photosynthetic efficiency.

3. Improve research on sequestration in grasslands, forage rotations, and natural features like wetlands, trees, and other uncropped landscapes.

4. Improve our understanding and modelling of carbon inputs.

5. Enhance research on energy efficiency in agriculture

Farm Stewardship Programming

The design and administration of Farm Stewardship programming must align with the objectives of the strategy and provide meaningful support for projects that support resilience and improve carbon management. Programs also need to be complementary with carbon offset protocols, government conservation programs and private funding opportunities like ALUS (Alternative Land Use Services)

Administration of Voluntary Offsets

The Minister of Agriculture should investigate he possibility of using existing verification systems at Saskatchewan Crop Insurance Corporation which could reduce the administrative complexity of carbon offsets.

Coordination of programming on invasive species and disease

Climate change may already be a factor in the spread of plant and animal diseases, new invasive weed species and insects. Improved coordination will be required to manage and control these risks.

Ministry of Economy

The Provincial Climate Strategy commits to expand renewable power generation with an ultimate goal of 50 per pent of the provinces power from renewable energy resources by 2030. Agricultural producers are important partners in helping the province meet these targets because much of the construction of renewable infrastructure will occur on agricultural lands. The Ministry of Economy needs to develop additional resources to assist municipalities and rural landowners in their dealings with renewable energy project proponents. APAS supports an arm's length "Landowner Advocate" whose mandate would serve as independent information source and facilitator to ensure a balanced relationship exists between renewable energy project developers and rural landowners and communities.

Ministry of Highways

The movement of grain transportation from rail on to the provincial and municipal road system has increased the carbon foot print of grain transportation and increased costs to government and producers.

Saskatchewan should continue active support for shortline railways and advocate for federal transportation policies to facilitate the sale of unused branchlines to short line railways and protect public loading sites.