REGULAR AGRICULTURAL SERVICE BOARD **MEETING AGENDA**

9:30 AM

Council Chambers

Wednesday, June 23, 2021 Administration Building #1 CALL TO ORDER #2 ADOPTION OF AGENDA #3 **MINUTES** 3.1 Regular Agricultural Service Board Meeting minutes held Wednesday, May 26th to be adopted. 1 3.2 Business Arising from the Minutes #4 DELEGATION #5 **BUSINESS** 5.1 Clubroot of Canola 6 5.2 Shelterbelt Program - 2022 34 5.3 Beaver Incentive 45 5.4 Manager's Report 49 MEMBERS REPORTS #6 • Chair Warren Wohlgemuth • Vice Chair Stephen Lewis • Reeve Dale Smith • Councillor Bill Smith • Member Richard Brochu • Member Larry Smith • Member Mark Pellerin

#7 CORRESPONDENCE

- Signed Letter to Minister of AB Ag-downloading
- Alberta Crop Report May 18
- Alberta Crop Report May 25
- Alberta Crop Report June 1
- Alberta Crop Report June 8
- Central Peace Region 5 Day Average Precipitation Accumulations 1991-2020
- Precipitation Received June 1-9
- Precipitation Received May 26-June 8
- Growing Season Precipitation Relative to Normal as of June 8
- Growing Season Precipitation Totals as of June 8
- ASB Resolution Grading Sheet
- ASB Resolution Grading Responses
- ASB Resolution Granding Summary
- Fertilizer Emissions June 16

Minutes of a

REGULAR AGRICULTURAL SERVICE BOARD MUNICIPAL DISTRICT OF GREENVIEW NO. 16

Greenview Administration Building, Valleyview, Alberta, on Wednesday, May 26, 2021

# 1:	Chair Warren Wohlgemuth called the meeting to order at 9:26	a.m.
CALL TO ORDER		

PRESENT	A.S.B. Member – Chair	Warren Wohlgemuth
	A.S.B. Member – Reeve	Dale Smith
	A.S.B. Member – Councillor	Bill Smith
	A.S.B. Member	Larry Smith

ATTENDING Manager, Agriculture Services Sheila Kaus

Agriculture Supervisor Trainee

Rristin King
Beautification Coordinator

Problem Wildlife Officer

Interim General Manager, Community Services

Manager, Marketing & Communications

Recording Secretary

Kristin King
Jessica McCormick
Ben Brochu
Dennis Mueller
Stacey Sevilla
Teresa Marin

Agricultural Service Administrative Support Denise Baranowski

A.S.B. Member Richard Brochu
A.S.B. Member – Vice-Chair Stephen Lewis

#2: MOTION: 21.05.44. Moved by: COUNCILLOR BILL SMITH

A.S.B. Member

That the Agricultural Service Board adopt the May 26, 2021 Regular Agricultural

Service Board Meeting Agenda as presented.

CARRIED

Mark Pellerin

#3.1 REGULAR
AGRICULTURAL
SERVICE BOARD
MEETING MINUTES

ABSENT

MOTION: 21.05.45. Moved by: MEMBER LARRY SMITH

That the Agricultural Service Board adopt the minutes of the Regular Agricultural Service Board Meeting held on Wednesday, April 28, 2021, with the following changes;

- Motion: 21.04.38, Heavy Harrows \$250.00 – item was missed.

CARRIED

#3.4 BUSINESS ARISING FROM MINUTES

3.4 BUSINESS ARISING FROM MINUTES

The Peace Country Beef trials have been started in DeBolt and the organization has received their funding. It is a two-year project, and therefore they will require funding next year too.

M.D. of Greenview No. 16

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#5 BUSINESS

5.0 BUSINESS

5.1 ASB MEETING REPORT

ASB MEETING REPORT

MOTION: 21.05.46. Moved by: COUNCILLOR BILL SMITH

That the Agricultural Service Board accept the Agriculture Service Board Meeting

report for information, as presented.

CARRIED

5.2 CLUBROOT OF CANOLA – PEST NOTICE SPECIFICATION

CLUBROOT OF CANOLA – PEST NOTICE SPECIFICATION

MOTION: 21.05.47. Moved by: REEVE DALE SMITH

That the Agricultural Service Board accept the Policy 6308: Clubroot of Canola

Report for information, as presented.

CARRIED

#4.0 DELEGATION

4.0 DELEGATIONS

4.1 CLEANFARMS

Delegation was in attendance to discuss end of use disposal/market options of

agricultural plastics.

CLEANFARMS DELEGATION PRESENTATION

MOTION: 21.05.48. Moved by: REEVE DALE SMITH

That the Agricultural Service Board accept the Cleanfarms presentation for

information, as presented.

CARRIED

BUSINESS PLAN FOR AGRICULTURE PLASTICS WITHIN GREENVIEW

MOTION: 21.05.49. Moved by: COUNCILLOR BILL SMITH

That the Agricultural Service Board direct Administration to prepare a business

plan for agriculture plastics within Greenview.

CARRIED

Chair Wohlgemuth recessed the meeting at 10:50 a.m.

Chair Wohlgemuth reconvened the meeting at 11:08

5.3 BEAVER HARVEST PROGRAM

BEAVER HARVEST PROGRAM

MOTION: 21.05.50. Moved by: MEMBER LARRY SMITH

That the Agricultural Service Board accept the Beaver Harvest Program Report

for information, as presented.

CARRIED

5.4 FUSARIUM BYLAW

FUSARIUM BYLAW MOTION: 21.05.51. Moved by: REEVE DALE SMITH

That the Agricultural Service Board accept the report on the Peace Region

Proposed Invasive Species Bylaw for information, as presented.

CARRIED

DRAFT – UNLISTED AGRICULTURAL PEST BYLAW

MOTION: 21.05.52. Moved by: REEVE DALE SMITH

That the Agricultural Service Board direct Administration to draft an Unlisted

Agricultural Pest Bylaw.

CARRIED

5.5 Veterinary Services Incorporated (V.S.I.) – POLICY 6307

POLICY 6307 VETERINARY SERVICES INCORPORATED – APPROVE THE

MOTION: 21.05.53. Moved by: COUNCILLOR BILL SMITH

That the Agricultural Service Board approve the amendment to Policy 6307:

Veterinary Services Incorporated, as presented.

AMENDMENT CARRIED

5.6 NON-PROFIT WEED PULL

NON-PROFIT WEED

MOTION: 21.05.54. Moved by: MEMBER LARRY SMITH

That the Agricultural Service Board approve a Scentless Chamomile Incentive Program within the Hamlet of Grande Cache, surrounding Co-operatives, and

Enterprises, with funds to come from the Agriculture Service Budget.

CARRIED

5.7 MANAGERS' REPORT

MANAGERS' REPORT

MOTION: 21.05.55. Moved by: REEVE DALE SMITH

That the Agricultural Service Board accept the Managers' report as presented.

CARRIED

#6 MEMBERS' BUSINESS & REPORTS

6.0 MEMBERS' BUSINESS & REPORTS

MANAGER AND ASB MEMBERS REPORTS

COUNCILLOR BILL SMITH updated the Agriculture Service Board on his recent activities, which include;

- No report.

REEVE DALE SMITH updated the Agriculture Service Board on his recent activities, which include;

- No report.

CHAIR WARREN WOHLGEMUTH updated the Agriculture Service Board on his recent activities, which include;

- No report.

MEMBER LARRY SMITH updated the Agriculture Service Board on his recent activities, which include;

- No report.

MEMBER RICHARD BROCHU updated the Agriculture Service Board on his recent activities, which include;

Not in attendance.

VICE CHAIR STEPHEN LEWIS updated the Agriculture Service Board on his recent activities, which include;

- Not in attendance.

MEMBER MARK PELLERIN updated the Agriculture Service Board on his recent activities, which include;

- Not in attendance

MEMBERS BUSINESS AND REPORTS

MOTION: 21.05.56. Moved by: MEMBER LARRY SMITH

That the Agricultural Service Board accept the Members reports as information.

CARRIED

#7 CORRESPONDENCE

7.0 CORRESPONDENCE

ASB CORRESPONDENCE MOTION: 21.05.57. Moved by: REEVE DALE SMITH

That the Agricultural Service Board accept the correspondence as information.

CARRIED

Minutes of a Regular Agriculture Service Board Meeting M.D. of Greenview No. 16 May 26, 2021

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#8 ADJOURNMENT **8.0 ADJOURNMENT**

ASB ADJOURNMENT MOTION: 21.05.58. Moved by: REEVE DALE SMITH

That this Agricultural Service Board meeting adjourn at 11:50 p.m.

CARRIED

MANAGER, AGRICULTURE SERVICES

ASB CHAIRMAN



REQUEST FOR DECISION

SUBJECT: Policy 6308: Clubroot of Canola

SUBMISSION TO: AGRICULTURAL SERVICES BOARD REVIEWED AND APPROVED FOR SUBMISSION

MEETING DATE: June 23, 2021 CAO: MANAGER: SK DEPARTMENT: AGRICULTURE DCAO SW PRESENTER:

STRATEGIC PLAN: Level of Service LEG:

RELEVANT LEGISLATION:

Provincial (cite) - N/A

Council Bylaw/Policy (cite) – Policy 6308: Clubroot of Canola

RECOMMENDED ACTION:

MOTION: That the Agricultural Service Board recommends the amendments to Policy 6308: Clubroot of Canola to the Policy Review Committee.

BACKGROUND/PROPOSAL:

After discussions at the April 26th Agricultural Service Board meeting, Administration researched the present Policy 6308: Clubroot of Canola to ensure that it is reflective of the Board's recommendations and the most recent scientific advancements regarding the pathogen. Administration reviewed Greenview clubroot case data, applied a research approved algorithm to the data to remove subjectivity, and compared the current clubroot situation in Greenview to other municipalities within the Province of Alberta.

While the policy currently lists a 1-4 (3 year) pest notice for infested fields (Section 3.3.7), it does not consider spore load of those fields. Greenview has instances suggestive of low spore load infestations and therefore the policy should protect against the proliferation of resistant breaking pathotypes.

ID= >2%		12
ID= >5%		3
ID=<5% - >10%	Mild	4
ID=10-60%	Moderate	8
ID=>60%	Severe	0

Three subject matter experts were consulted as to their recommendations regarding the potential application of a 1-3 or 2-year break Pest Notice when spore loads appear low, and indefinite notices when a resistant breaking pathotype has been identified. Two subject matter experts agreed that the situation within Greenview is suggestive of a low spore load situation, below 2% disease severity, and one expert abstained from offering an opinion. While agreeing to the shortened pest notice for low spore loads, they did

caution that surveillance of these fields would be imperative once the pest notice was lifted and the canola was planted. Both experts were satisfied this risk could be mitigated with the inclusion of an indefinite pest notice issued should a resistant breaking pathotype be identified when no resistant cultivars are available.

Greenview has identified 30 land parcels impacted by clubroot, of these fields, 19 are below 10% disease incidence, 15 parcels are under 5%, 12 parcels are under 2%, and 4 parcels are under 1% disease occurrence.

Pathotypic shift, which can be indicative of high spore loads, has not been prevalent in Greenview. Consultations with impacted producers revealed that existing cases have been found in fields planted to susceptible varieties.

Administration recommends the revised policy which includes revised rotational requirements, removal of circular reference, and clear delineation of responsibilities for procedure, Council and Administration.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the recommended action is that the policy will incorporate the most recent research on the clubroot pathogen while still protecting agricultural lands and slowing the spread of the clubroot pathogen.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: The Agricultural Service Board has the alternative to alter or deny the recommended motion.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will submit the revised policy to the Policy Review Committee in accordance with approval from the Agricultural Service Board.

ATTACHMENT(S):

- Policy 6308: Clubroot of Canola Original
- Policy 6308: Clubroot of Canola Edited
- Policy 6308: Clubroot of Canola Revised Clean Copy
- Greenview Clubroot Infestations by Township
- Alberta Clubroot Management Plan

POLICY

Title: CLUBROOT OF CANOLA

Policy No: 6308

Effective Date: October 26, 2020

Motion Number: 20.10.575

Supersedes Policy No: None

Review Date: October 26, 2023



Purpose: The purpose of this policy is to establish a management plan to prevent and/or minimize the spread and impact of Clubroot in Greenview. Greenview Council recognizes that Clubroot of Canola is declared a pest under the *Agricultural Pests Act* of Alberta and is a concern to agricultural producers within the municipality. Council further recognizes that it is beneficial to the agricultural industry to 'take active measures to prevent the establishment of, control or destroy pests in the municipality' (Sec. 6, *Agricultural Pests Act*, R.S.A 2000, Chapter A-8).

1. DEFINITIONS

- 1.1. **Manager of Agriculture Services** means the individual appointed as such through motion by Greenview Council and by virtue of position (*Agricultural Service Board Act*) who acts as a Pest Inspector.
- 1.2. **Agricultural Pests Act** means the Alberta *Agricultural Pests Act* (R.S.A. 200, Chapter A-8) and the *Pest and Nuisance Control Regulation* (184/2001) including any amendments or successor legislation thereto.
- 1.3. **Agricultural Service Board** means the Board appointed by Greenview Council to address agricultural concerns.
- 1.4. **Alberta Clubroot Management Plan** means the plan to manage clubroot of canola as set forth by Alberta Agriculture and Forestry.
- 1.5. **Clubroot of Canola ("Clubroot")** means the serious soil-borne disease caused by *Plasmodiophora brassicae*.
- 1.6. **Control** means to destroy or manage the disease through measures deemed acceptable by the Pest Inspector and this Policy.
- 1.7. **Crop Residue** means the material left in an agricultural field after the crop has been harvested.
- 1.8. Cruciferous Plants means a plant family which includes; canola/rapeseed and mustard, as well as the cabbage family (broccoli, brussel sprouts, cabbage, cauliflower, kale, kohlrabi, radish, rutabaga and turnip).

- 1.9. **Destroy** means to kill all growing parts or to render reproductive mechanisms non-viable.
- 1.10. **Geographic Area** means an area of land under the jurisdiction of Greenview.
- 1.11. **Greenview** means the Municipal District of Greenview No. 16.
- 1.12. **Infested** means a property containing Clubroot of Canola.
- 1.13. **Notice** means a notice in writing issued by a Pest Inspector under section 12 of the *Agricultural Pests Act*.
- 1.14. **Period of Restriction** means a period of time which a cruciferous crop may not be planted or grown.
- 1.15. **Pest** means an animal, bird, insect, plant or disease declared a pest under section two of the *Agricultural Pests Act*.
- 1.16. **Pest Inspector** means an inspector appointed by Greenview Council or by the Minister to carry out the *Agricultural Pests Act*.
- 1.17. **Producer** means a farm operator.
- 1.18. **Soil Disturbance** means anything that can or may move soil.
- 1.19. **Suspected Field** means any field for which it has displayed any symptoms or signs of Clubroot of Canola.

2. POLICY STATEMENT

- 2.1. Clubroot of Canola poses a serious threat to the Canola industry by reducing yields, it reduces the quantity and quality of the oil produced from the seeds and the spores can remain viable for twenty (20) years or more according to current research.
 - 2.1.1. Clubroot was declared a pest to Alberta under the *Agricultural Pests Act* (APA) in 2007. Section 6 of the APA states that: a local authority shall take active measures to prevent the establishment of, or to control or destroy pests in the municipality.
- 2.2. Greenview Council shall appoint Pest Inspectors (as per section 10 of the *Agricultural Pests Act*.
 - 2.2.1. The Agricultural Fieldman, under the *Agricultural Service Board Act*, is by virtue of that office, an inspector under the *Agricultural Pests Act*.
- 2.3. The Manager of Agricultural Services shall establish protocols to be followed by Pest Inspectors for inspections, sampling techniques, and for entering land. These procedures shall be designed to minimize the potential for clubroot spore transferral between fields by Pest Inspectors and will follow the Alberta Clubroot Management Plan.

3. PROCEDURE

3.1. In the event that a sample from a suspected field returns as positive for Clubroot of Canola (DNA analysis), Greenview shall:

- 3.1.1 Inform the Agricultural Service Board and Municipal Council of the discovery, and of any enforcement actions taken.
- 3.1.2 For Research purposes only, canola and other cruciferous crops may be permitted to be grown on lands where a Notice has been issued with respect to Clubroot of Canola on the lands provided that pre-approval has been granted by the Manager of Agricultural Services at his/her sole discretion.
- 3.1.2 Ensure that all Canola fields with which the landowner(s) and/or producer(s) is known to be involved are inspected (including that landowner(s) and/or producer(s) own field(s), custom seeding, custom harvest, etc.).
 - a. If the producer is operating on lands other than their own, a release of information form shall be signed by the registered landowner before there is correspondence with the producer.
- 3.1.3 Ensure the landowner(s) and/or producer(s) receive a written Notice as per the *Agricultural Pests Act* and associated Regulations through registered mail or delivery in person and are required to follow the Best Management Guidelines in the Alberta Clubroot Management Plan.
 - a. Additional information may include:
 - i. The Alberta Clubroot Management Plan
 - ii. Clubroot of Canola Policy 6308
 - iii. Clubroot Identification Information
- 3.1.4 All landowner(s) and/or producer(s) within a one(1) mile or 1.6 kilometer radius of the field where Clubroot was confirmed, will be sent written notice that Clubroot was confirmed within a one (1) mile or 1.6 kilometer radius of their property.
 - a. Additional information may include:
 - i. The Alberta Clubroot Management Plan
 - ii. Clubroot of Canola Policy 6308
 - iii. Clubroot Identification Information
- 3.1.5 In order to better understand how the disease was introduced and spread, endeavour to gather as much information about the Clubroot infected field as possible, including type and variety of the crop, seed retailer, equipment movement, custom operators used, soil type (esp. pH) and drainage patterns.
- 3.2 The landowner(s) and/or producer(s) of lands confirmed with Clubroot may harvest the crop as per conditions set out in the Alberta Clubroot Management Plan, and for the subsequent three years following discovery of Clubroot, no host crop (including Clubroot resistant Canola) shall be planted. This is considered a one in four year rotation.
- 3.3 The landowner(s) and/or producer(s) of lands confirmed with Clubroot shall be required to adopt the following control measures, as per the Alberta Clubroot Management Plan:
 - 3.3.1 The crop shall be harvested, and the canola seed shall be sold for crushing, but **not** sold for feed or seed, and shall **not** be retained for reseeding

- 3.3.2 Crop residue shall be chopped and evenly spread back onto the infected land, not baled or removed
- 3.3.3 Any seed load transported from the infested land shall be securely covered (tarped)
- 3.3.4 Soil disturbance on infected land must be minimized to prevent movement to uninfected land
- 3.3.5 Any crop residue and soil must be cleaned from all equipment and implements and left on the land before taking equipment off the infected land
- 3.3.6 Implements, or parts thereof, which come directly into contact with the soil should be sterilized, as per the Alberta Clubroot Management Plant (Appendix 1 and 2)
- 3.3.7 No clubroot susceptible crops (cruciferous plants) including clubroot resistant canola varieties shall be seeded for a period of three (3) consecutive years following the year in which Clubroot test result is positive. Should the landowner(s) and/or producer(s) of infected land plant canola regardless of positive testing, the Manager of Agricultural Services shall:
 - a. Issue a Notice to the landowner(s) and/or producer(s) as per the *Agricultural Pests Act*.
 - If the landowner(s) and/or producer(s) fails to abide by the Notice, the Manager of Agricultural Services shall take appropriate measures to destroy the planted crop.
 - ii. Should the municipality destroy the crop, an invoice shall be issued to the landowner(s) and/or producer(s) for the labour, chemical and equipment costs of the crops destruction as per Provincial Legislation, including the ability of the municipality to add the arrears amount to the property taxes.
 - iii. Should enforcement be required, additional administrative fees will be charged at 15% of the cost of enforcement.
- 3.3.8 After the period of restriction, canola may be seeded using only Clubroot resistant varieties and rotating the resistant varieties with each subsequent planting.
- 3.3.9 Host plants of the clubroot pathogen, as listed in the Alberta Clubroot Management Plant, and volunteer canola shall be destroyed from within crops on the infested lands, for a period of three (3) consecutive years following the year in which a Clubroot test result is positive.
- 3.3.10 Inform any contractors or custom operators who may enter onto the land that Clubroot has been found on the property, and advise them to properly clean and disinfect any equipment which comes into contact with the soil.
- 3.4. The landowner(s) and/or producer(s) of the land who are disturbing the soil will have the responsibility to follow the Best Management Guidelines that are laid out in the Alberta Clubroot Management Plant that is set out by Alberta Agriculture and Forestry to reduce the spread of the disease with the movement of soil and equipment.

4. COUNCIL RESPONSIBILITIES

- 4.1. Council shall appoint Pest Inspectors (as per section 10 of the Agricultural Pests Act).
 - 4.1.1. The Agricultural Fieldman, under the *Agricultural Service Board Act*, is by virtue of that office, an inspector under the *Agricultural Pests Act*.

5. ADMINISTRATION RESPONSIBILITIES

- 5.1 The Manage of Agricultural Services shall establish protocols to be followed by Pest Inspectors for inspection, sampling techniques, and for entering land. These procedures shall be designated to minimize the potential for clubroot spore transferral between fields by Pest Inspectors and will follow the Alberta Clubroot Management Plan.
- 5.2 Annually, the Manager of Agricultural Services shall schedule inspections of Canola fields within Greenview. In preparing this inspection schedule, the Agricultural Fieldman shall use the following criteria:
 - 5.2.1. The fields inspected shall be distributed across the geographic area of the municipality.
 - 5.2.2. Priority inspections will be given to fields where:
 - a. The landowner(s) and/or producer(s) are known or believed to be involved in farming outside of Greenview.
 - b. Inspectors notice Canola which appears to be showing symptoms of Clubroot (wilting, stunting, yellowing and early maturing).
 - c. When earth moving equipment (i.e. pipeline, drilling, service rigs or road construction equipment) suspected to be from outside the Peace Region has been actively operated on the land.
 - d. The property previously has Clubroot documented and verified through DNA analysis with an annual deadline for re-inspections of June 30.
 - e. All fields within a one (1) mile or 1.6 kilometer radius of any field where Clubroot of Canola was confirmed and any fields associated with the landowner(s) and/ or producer(s) of any field where Clubroot of Canola was confirmed.
- 5.3. Advise other Peace Region Agricultural Fieldman as well as the appropriate provincial departments that Clubroot has been found within Greenview.
- 5.4. Greenview Agricultural Services will provide information and education to landowner(s) and/or producer(s) regarding the spread of Clubroot of Canola.
- 5.5 Greenview will advocate that all seed (of a host crop) should be a Clubroot resistant variety and should be treated with a registered fungicide that includes the genus for Clubroot of Canola on the label list of controlled fungi, particularly if from an out of province or unknown source.

Title: CLUBROOT OF CANOLA

Policy No: 6308

Effective Date:

Motion Number:

Supersedes Policy No: None

Review Date:



Purpose: The purpose of this policy is to establish a management plan to prevent and/or minimize the spread and impact of Clubroot in Greenview. Greenview Council recognizes that Clubroot of Canola is declared a pest under the *Agricultural Pests Act* of Alberta and is a concern to agricultural producers within the-municipalityGreenview. Council further recognizes that it is beneficial to the agricultural industry to 'take active measures to prevent the establishment of, control or destroy pests in the-municipalityGreenview (Sec. 6, *Agricultural Pests Act*, R.S.A 2000, Chapter A-8).

1. DEFINITIONS

- 1.1. Manager of Agriculturale Services means the individual appointed as the Agricultural Fieldman such through motion by Greenview Council and by virtue of position (Agricultural Service Board Act) who acts as a Pest Inspector.
- 1.2. **Agricultural Pests Act** means the Alberta *Agricultural Pests Act* (R.S.A. 200, Chapter A-8) and the *Pest and Nuisance Control Regulation* (184/2001) including any amendments or successor legislation thereto.
- 1.3. **Agricultural Service Board** means the Board appointed by Greenview Council to address agricultural concerns.
- 1.4. **Alberta Clubroot Management Plan** means the plan to manage clubroot of canola as set forth by Alberta Agriculture and Forestry.
- 1.5. **Clubroot of Canola ("Clubroot")** means the serious soil-borne disease caused by *Plasmodiophora brassicae*.
- 1.6. **Control** means to destroy or manage the disease through measures deemed acceptable by the Pest Inspector and this Policy.
- 1.7. **Crop Residue** means the material left in an agricultural field after the crop has been harvested.
- 1.8. Cruciferous Plants means a plant family which includes; canola/rapeseed and mustard, as well as the cabbage family (broccoli, brussel sprouts, cabbage, cauliflower, kale, kohlrabi, radish, rutabaga and turnip).

- 1.8. ID % means a value derived from application of the accepted algorithm to determine clubroot disease severity: (#1 total*1)+(#2 total*3))/100)*100
- 1.9. **Destroy** means to kill all growing parts or to render reproductive mechanisms non-viable.
- 1.10. Geographic Area means an area of land under the jurisdiction of Greenview.
- 1.11. Geographical Heat Map means a map delineated by Township, indicating how many cases of clubroot have been found.
- 1.10.1.12.
- 1.11.1.13. **Greenview** means the Municipal District of Greenview No. 16.
- 1.14. ID % means a value derived from application of the accepted algorithm to determine clubroot disease severity: (#1 total*1)+(#2 total*3))/100)*100
- 1.12.1.15. Infested means a property containing Clubroot of Canola.
- 1.13.1.16. Notice means a notice in writing issued by a Pest Inspector under section 12 of the Agricultural Pests Act.
- 1.14.1.17. Period of Restriction means a period of time which a cruciferous crop may not be planted or grown.
- 1.15.1.18. Pest means an animal, bird, insect, plant or disease declared a pest under section two of the *Agricultural Pests Act*.
- 1.16.1.19. Pest Inspector means an inspector appointed by Greenview Council or by the Minister to carry out the *Agricultural Pests Act*.
- 1.17.1.20. **Producer** means a farm operator.
- 1.18.1.21. Soil Disturbance means anything that can or may move soil.
- Suspected Field means any field for which it has displayed any symptoms or signs of Clubroot of Canola. Symptomatic Sample means canola roots with galls indicative of clubroot infection.
- 1.19.1.23.

2. POLICY STATEMENT

- 2.1. Clubroot of Canola poses a serious threat to the Canola industry by reducing yields, it reduces the quantity and quality of the oil produced from the seeds and the spores can remain viable for twenty (20) years or more according to current research. Greenview understands Clubroot of Canola poses a serious threat to the agricultural producers of our community. With the dual threat of the diseases impact on yields and the potential loss of genetic resistance through shortened rotations, Greenview has developed Policy 6308 to protect our agricultural producer's economic viability.
- 2.1.
 - A. Clubroot was declared a pest to Alberta under the Agricultural Pests Act (APA) in 2007. Section 6 of the APA states that: a local authority shall take active measures to prevent the establishment of, or to control or destroy pests in the municipalityGreenview.

- 2.2. Greenview Council shall appoint Pest Inspectors (as per section 10 of the *Agricultural Pests* Act.
 - A. The Agricultural Fieldman, under the Agricultural Service Board Act, is by virtue of that office, an inspector under the Agricultural Pests Act.
- 2.3. The Manager of Agricultural Services shall establish protocols to be followed by Pest Inspectors for inspections, sampling techniques, and for entering land. These procedures shall be designed to minimize the potential for clubroot spore transferral between fields by Pest Inspectors and will follow the Alberta Clubroot Management Plan.

3. PROCEDURE

3.1. In the event that a <u>symptomatic</u> sample <u>sent to an accredited lab for analysis returns a DNA positive for from a suspected field returns as positive for Clubroot of Canola (DNA analysis), Greenview shall: In the event that a symptomatic sample sent to an accredited lab for analysis returns a DNA positive for Clubroot, Greenview shall:</u>

3.1.3.2.

- A. Inform the Agricultural Service Board and Municipal Council of the discovery, and of any enforcement actions taken.
- 3.1.2 For Research purposes only, canola and other cruciferous crops may be permitted to be grown on lands where a Notice has been issued with respect to Clubroot of Canola on the lands provided that pre-approval has been granted by the Manager of Agricultural Services at his/her sole discretion.
- B. Ensure that all Canola fields with which the landowner(s) and/or producer(s) is known to be involved are inspected (including that landowner(s) and/or producer(s) own field(s), custom seeding, custom harvest, etc.).
 - i. If the producer is operating on lands other than their own, a release of information form shall be signed by the registered landowner before there is correspondence with the producer.
- Ensure the landowner(s) and/or producer(s) receive a written Pest Notice as per the Agricultural Pests Act and associated Regulations following these parameters, as set by Council: through registered mail or delivery in person and are required to follow the Best Management Guidelines in the Alberta Clubroot Management Plan.
 - i. Additional information may include:
 - i. The Alberta Clubroot Management Plan
 - ii. Clubroot of Canola Policy 6308
 - iii. Clubroot Identification Information
 - 1-3 rotation or a two-year break when ID% is less than 2%;
 - ii. 1-4 rotation or a three-year break when ID% is greater than 2% but less than 10%;
 - iii. Should pathotype testing reveal the field is infested with a resistance breaking pathotype the pest notice shall be until there is a canola cultivar with resistance to that specific pathotype. All other brassica crops shall be prohibited.

B. All landowner(s) and/or producer(s) within a one (1) mile or 1.6 kilometer radius of the field where Clubroot was confirmed, will be sent written confirmation notice that Clubroot was confirmed within a one (1) mile or 1.6 kilometer radius of their property with an information package. All landowner(s) and/or producer(s) within a one (1) mile or 1.6 kilometer radius of the field where Clubroot was confirmed, will be sent written confirmation that Clubroot was confirmed within a one (1) mile or 1.6 kilometer radius of their property with an information package.

D.C. —

- i. Additional information may include:
 - i. The Alberta Clubroot Management Plan
 - ii. Clubroot of Canola Policy 6308
 - iii.—Clubroot Identification Information
- E. In order to better understand how the disease was introduced and spread, endeavour to gather as much information about the Clubroot infected field as possible, including type and variety of the crop, seed retailer, equipment movement, custom operators used, soil type (esp. pH) and drainage patterns.
- 3.2 The landowner(s) and/or producer(s) of lands confirmed with Clubroot may harvest the crop as per conditions set—out in the Alberta Clubroot Management Plan, and for the subsequent three years following discovery of Clubroot, no host crop (including Clubroot resistant Canola) shall be planted. This is considered a one in four year rotation.
- 3.3 The landowner(s) and/or producer(s) of lands confirmed with Clubroot shall be required to adopt the following <u>immediate</u> control measures, as per the Alberta Clubroot Management Plan:
 - A.D. The crop shall be harvested, and the canola seed shall be sold for crushing, but <u>not</u> sold for feed or seed, and shall <u>not</u> be retained for reseeding.
 - B.E. Crop residue shall be chopped and evenly spread back onto the infected land, not baled or removed.
 - <u>C.F.</u> Any seed load transported from the infested land shall be securely covered (tarped).
 - D.G. Soil disturbance on infected land must be minimized to prevent movement to uninfected land.
 - E.H. Any crop residue and soil must be cleaned from all equipment and implements and left on the land before taking equipment off the infected land.
 - Implements, or parts thereof, which come directly into contact with the soil should be sterilized, as per the Alberta Clubroot Management Plant (Appendix 1 and 2).
 - J. Inform any contractors or custom operators who may enter onto the land that Clubroot has been found on the property, and advise them to properly clean and disinfect any equipment which comes into contact with the soil.
 - G.K. No clubroot susceptible crops (cruciferous plants) including clubroot resistant canola varieties shall be seeded for a period of three (3) consecutive years following the year in which Clubroot test result is positive. Should the landowner(s) and/or producer(s)

of infected land plant canola fail to abide by the notice regardless of positive testing, the Manager of Agricultural Services shall:

- a. Issue a Notice to the landowner(s) and/or producer(s) as per the Agricultural Pests Act.
 - If the landowner(s) and/or producer(s) fails to abide by the Notice, the Manager of Agricultural Services shall.
 - i. Take appropriate measures to destroy the planted crop.
- ii. Should Greenview the municipality destroy the crop, an invoice shall be issued to the landowner(s) and/or producer(s) for the labour, chemical and equipment costs of the crops destruction as per Provincial Legislation, including the ability of the municipality Greenview to add the arrears amount to the property taxes. Should Greenview destroy the crop, all applicable costs shall be forwarded to the landowner(s) and/or producer(s) including labour, chemical and equipment costs of the crop destruction as per Provincial Legislation, including the ability of Greenview to add the arrears amount to the property taxes.

- iii. Should enforcement be required, where the landowner(s) or producer(s) does not elect to perform the control themselves additional administrative fees will be charged at 15% of the cost of enforcement.
- H.L. After the period of restriction <u>listed in the Notice has expired</u>, canola may be seeded. using only Clubroot resistant varieties and rotating the resistant varieties with each subsequent planting.
- I. Host plants of the clubroot pathogen, as listed in the Alberta Clubroot Management Plant, and volunteer canola shall be destroyed from within crops on the infested lands, for a period of three (3) consecutive years following the year in which a Clubroot test result is positive.
- J. Inform any contractors or custom operators who may enter onto the land that Clubroot has been found on the property, and advise them to properly clean and disinfect any equipment which comes into contact with the soil.
- 3.4. The landowner(s) and/or producer(s) of the land who are disturbing the soil will have the responsibility to follow the Best Management Guidelines that are laid out in the Alberta Clubroot Management Plant that is set out by Alberta Agriculture and Forestry to reduce the spread of the disease with the movement of soil and equipment.

4. COUNCIL RESPONSIBILITIES

- 4.1. Council shall appoint Pest Inspectors (as per section 10 of the Agricultural Pests Act).
 - 4.1. Council shall appoint Pest Inspectors (as per section 10 of the Agricultural Pests Act).
 - 4.2. Council shall review the Clubroot of Canola policy annually, to ensure the policy is current.

- 4.2. Council shall review the Clubroot of Canola policy annually, to ensure the policy is informed by the most recent advancements in knowledge of the clubroot pathogen.
 - 4.2.1. The Agricultural Fieldman, under the Agricultural Service Board Act, is by virtue of that office, an inspector under the Agricultural Pests Act.

5. ADMINISTRATION RESPONSIBILITIES

- 5.1 The Manager of Agricultural Services shall establish protocols and an inspection schedule to be followed outlining the following: to be followed by Pest Inspectors for inspection, sampling techniques, and for entering land. These procedures shall be designated to minimize the potential for clubroot spore transferral between fields by Pest Inspectors and will follow the Alberta Clubroot Management Plan.
- 5.2 Annually, the Manager of Agricultural Services shall schedule inspections of Canola fields within Greenview. In preparing this inspection schedule, the Agricultural Fieldman shall use the following criteria:
 - A. Ensure inspections are geographically conducted throughout Greenview.
 - B. Ensure consistent sampling techniques, record keeping and protocols are recorded upon inspection of each parcel of land.
 - C. Mitigation and control measures are adhered to reducing clubroot spore transferral between fields by Pest Inspectors.
 - <u>D.</u> Ensure impacted producers are informed of positive Clubroot DNA results prior to harvest.
 - <u>Ensure</u> the fields to be inspected are shall be distributed across the geographic area of the municipalityGreenview.
 - ——Sampling techniques, recordkeeping and protocols for entering land.
 - Mitigation and control of clubroot spore transferral between fields by Pest Inspectors and;
 - Timed to ensure impacted producers are informed of positive clubroot DNA results prior to harvest.
- 5.2 For Research purposes, canola and other cruciferous crops may be permitted to be grown on lands where a Notice has been issued with respect to Clubroot of Canola on the lands provided that pre-approval has been granted by the Manager of Agricultural Services at his/hertheir sole discretion. For Research purposes, canola and other cruciferous crops may be permitted to be grown on lands where a Notice has been issued, providing pre-approval has been granted by the Manager of Agricultural Services.
- 5.3
- 5.3 Administration shall develop a geographical heat map of infestations for use in mitigation plan development by industry and construction companies.
- In order to better understand how the disease was introduced and spread, administration shall gather as much information about the Clubroot infected field as possible, including type and variety of the crop, seed retailer, equipment movement, custom operators used, soil type, pH and drainage patterns.
 - A. Priority inspections will be given to fields where:

- a. The landowner(s) and/or producer(s) are known or believed to be involved in farming outside of Greenview.
- b. Inspectors notice Canola which appears to be showing symptoms of Clubroot (wilting, stunting, yellowing and early maturing).
- c. When earth moving equipment (i.e. pipeline, drilling, service rigs or road construction equipment) suspected to be from outside the Peace Region has been actively operated on the land.
- d. The property previously has Clubroot documented and verified through DNA analysis with an annual deadline for re-inspections of June 30.
- e. All fields within a one (1) mile or 1.6 kilometer radius of any field where Clubroot of Canola was confirmed and any fields associated with the landowner(s) and/ or producer(s) of any field where Clubroot of Canola was confirmed.
- 5.3. Advise other Peace Region Agricultural Fieldman as well as the appropriate provincial departments that Clubroot has been found within Greenview.
- 5.4.5.3. Greenview Agricultural Services will provide information and education to landowner(s) and/or producer(s) regarding the spread of Clubroot of Canola.
- 5.5 Greenview will advocate that all seed (of a host crop) should be a Clubroot resistant variety. and should be treated with a registered fungicide that includes the genus for Clubroot of Canola on the label list of controlled fungi, particularly if from an out of province or unknown source.

5.6-

Title: CLUBROOT OF CANOLA

Policy No: 6308

Effective Date:

Motion Number:

Supersedes Policy No: None

Review Date:



Purpose: The purpose of this policy is to establish a management plan to prevent and/or minimize the spread and impact of Clubroot in Greenview. Greenview Council recognizes that Clubroot of Canola is declared a pest under the *Agricultural Pests Act* of Alberta and is a concern to agricultural producers within Greenview. Council further recognizes that it is beneficial to the agricultural industry to 'take active measures to prevent the establishment of, control or destroy pests in Greenview (Sec. 6, *Agricultural Pests Act*, R.S.A 2000, Chapter A-8).

1. DEFINITIONS

- 1.1. **Manager of Agricultural Services** means the individual appointed as the Agricultural Fieldman through motion by Greenview Council and by virtue of position (*Agricultural Service Board Act*) who acts as a Pest Inspector.
- 1.2. **Agricultural Pests Act** means the Alberta *Agricultural Pests Act* (R.S.A. 200, Chapter A-8) and the *Pest and Nuisance Control Regulation* (184/2001) including any amendments or successor legislation thereto.
- 1.3. **Agricultural Service Board** means the Board appointed by Greenview Council to address agricultural concerns.
- 1.4. **Alberta Clubroot Management Plan** means the plan to manage clubroot of canola as set forth by Alberta Agriculture and Forestry.
- 1.5. **Clubroot of Canola ("Clubroot")** means the serious soil-borne disease caused by *Plasmodiophora brassicae*.
- 1.6. **Control** means to destroy or manage the disease through measures deemed acceptable by the Pest Inspector and this Policy.
- 1.7. **Crop Residue** means the material left in an agricultural field after the crop has been harvested.
- 1.8. Cruciferous Plants means a plant family which includes; canola/rapeseed and mustard, as well as the cabbage family (broccoli, brussel sprouts, cabbage, cauliflower, kale, kohlrabi, radish, rutabaga and turnip).

- 1.9. **Destroy** means to kill all growing parts or to render reproductive mechanisms non-viable.
- 1.10. Geographic Area means an area of land under the jurisdiction of Greenview.
- 1.11. **Geographical Heat Map** means a map delineated by Township, indicating how many cases of clubroot have been found.
- 1.12. Greenview means the Municipal District of Greenview No. 16.
- 1.13. **ID** % means a value derived from application of the accepted algorithm to determine clubroot disease severity: (#1 total*1) + (#2 total*3)/100) *100
- 1.14. Infested means a property containing Clubroot of Canola.
- 1.15. **Notice** means a notice in writing issued by a Pest Inspector under section 12 of the *Agricultural Pests Act*.
- 1.16. **Period of Restriction** means a period of time which a cruciferous crop may not be planted or grown.
- 1.17. **Pest** means an animal, bird, insect, plant or disease declared a pest under section two of the *Agricultural Pests Act*.
- 1.18. **Pest Inspector** means an inspector appointed by Greenview Council or by the Minister to carry out the *Agricultural Pests Act*.
- 1.19. Producer means a farm operator.
- 1.20. **Soil Disturbance** means anything that can or may move soil.
- 1.21. Symptomatic Sample means canola roots with galls indicative of clubroot infection.

2. POLICY STATEMENT

2.1. Greenview understands Clubroot of Canola poses a serious threat to the agricultural producers of our community. With the dual threat of the diseases impact on yields and the potential loss of genetic resistance through shortened rotations, Greenview has developed Policy 6308 to protect our agricultural producer's economic viability.

3. PROCEDURE

- 3.1. In the event that a symptomatic sample sent to an accredited lab for analysis returns a DNA positive for Clubroot, Greenview shall:
 - A. Ensure the landowner(s) and/or producer(s) receive a written Pest Notice as per the Agricultural Pests Act and associated Regulations following these parameters, as set by Council:

- i. 1-3 rotation or a two-year break when ID% is less than 2%;
- ii. 1-4 rotation or a three-year break when ID% is greater than 2%;
- iii. Should pathotype testing reveal the field is infested with a resistance breaking pathotype the pest notice shall be until there is a canola cultivar with resistance to that specific pathotype. All other brassica crops shall be prohibited.
- B. All landowner(s) and/or producer(s) within a 1.6 kilometer radius of the field where Clubroot was confirmed, will be sent written confirmation that Clubroot was confirmed within the above noted radius of their property with an information package.
- 3.2. The landowner(s) and/or producer(s) of lands confirmed with Clubroot shall be required to adopt the following immediate control measures;
 - A. The crop shall be harvested, and the canola seed shall be sold for crushing, but <u>not</u> sold for feed or seed, and shall **not** be retained for reseeding.
 - B. Crop residue shall be chopped and evenly spread back onto the infected land, not baled or removed.
 - C. Any seed load transported from the infested land shall be securely covered (tarped).
 - D. Soil disturbance on infected land must be minimized to prevent movement to uninfected land.
 - E. Any crop residue and soil must be cleaned from all equipment and implements and left on the land before taking equipment off the infected land.
 - F. Implements, or parts thereof, which come directly into contact with the soil shall be cleaned of as much soil as possible prior to leaving the field, as per the Alberta Clubroot Management Plan (Appendix 1 and 2). After soil removal, the equipment should be sprayed with a 2% bleach solution.
 - G. Inform any contractors or custom operators prior to activities on the parcel that the land is clubroot positive as part of the producers due diligence.
 - H. Should the landowner(s) and/or producer(s) of confirmed infected fields fail to abide by the notice, the Manager of Agricultural Services shall:
 - i. Take appropriate measures to destroy the planted crop.
 - ii. Should Greenview destroy the crop, all applicable costs shall be forwarded to the landowner(s) and/or producer(s) including labour, chemical and equipment costs of the crop destruction as per Provincial Legislation, including the ability of Greenview to add the arrears amount to the property taxes.
 - iii. Should enforcement be required, where the landowner(s) or producer(s) does not elect to perform the control themselves additional administrative fees will be charged at 15% of the cost of enforcement.

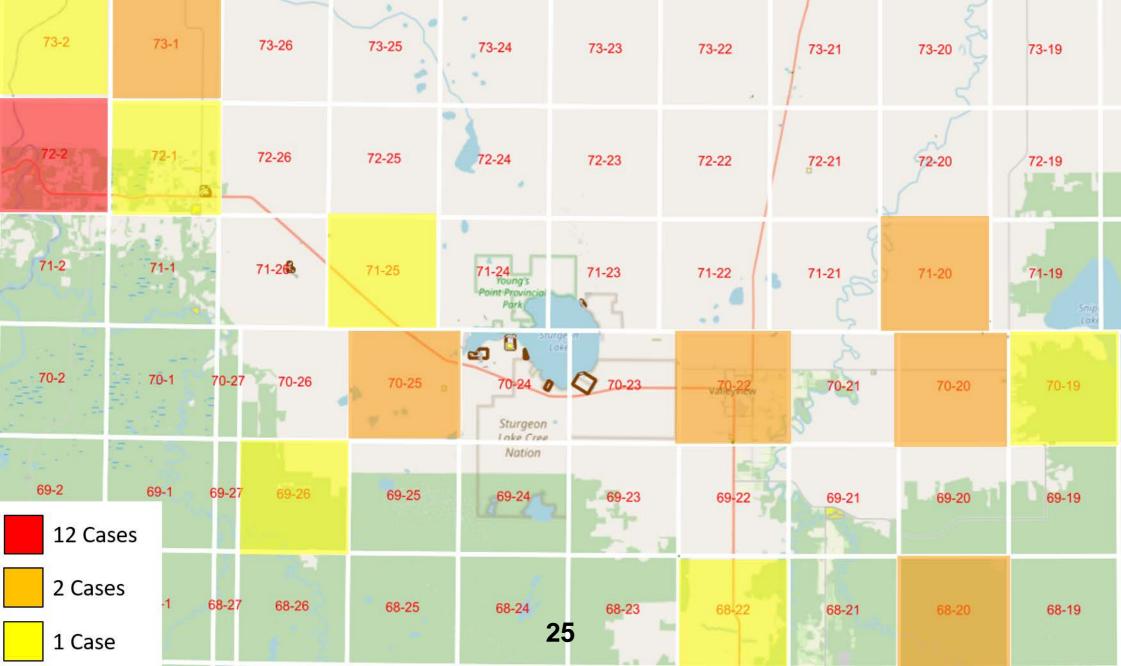
I. After the period of restriction listed in the Notice has expired, canola may be seeded.

4. COUNCIL RESPONSIBILITIES

- 4.1. Council shall appoint Pest Inspectors (as per section 10 of the Agricultural Pests Act).
- 4.2. Council shall review the Clubroot of Canola policy annually, to ensure the policy is current.

5. ADMINISTRATION RESPONSIBILITIES

- 5.1 The Manager of Agricultural Services shall establish protocols and an inspection schedule to be followed:
 - A. Ensure inspections are geographically conducted throughout Greenview.
 - B. Ensure consistent sampling techniques, record keeping and protocols are recorded upon inspection of each parcel of land.
 - C. Mitigation and control measures are adhered to reducing clubroot spore transferral between fields by Pest Inspectors.
 - D. Ensure impacted producers are informed of positive Clubroot DNA results prior to harvest.
- 5.2 For Research purposes, canola and other cruciferous crops may be permitted to be grown on lands where a Notice has been issued, providing pre-approval has been granted by the Manager of Agricultural Services.
- 5.3 Administration shall develop a geographical heat map of Clubroot infestations for use in developing a mitigation plan for industry and construction companies.
- 5.3. Greenview Agricultural Services shall provide information and education to landowner(s) and/or producer(s) regarding the spread of Clubroot of Canola.
- 5.5 Greenview shall advocate that all seed (of a host crop) should be a Clubroot resistant variety.



Notifications

COVID-19 Updates

- Alberta enters Stage 2 reopening: Public health measures remain in effect.
- Get vaccinated: Everyone 12+ can book first dose now, second doses available in stages.



 $\frac{\text{Home}}{\text{Home}} \rightarrow \frac{\text{Business and economy}}{\text{Dests}} \rightarrow \frac{\text{Crop diseases}}{\text{Clubroot} - \text{pest}} \rightarrow \frac{\text{Crop diseases}}{\text{Clubroot} - \text{pest}}$

Alberta clubroot management plan

On this page:

- Clubroot disease overview
- Clubroot Management Plan
- Regulatory status
- · Factors favouring clubroot's spread in Alberta
- Management plan rationale
- Best management practices
- Responsibilities

Clubroot disease overview

Clubroot is a serious soil-borne disease of canola, mustard and other crops in the cabbage family. Cole crop vegetables like broccoli, Brussels sprouts, cabbage, cauliflower, Chinese cabbage, kale, kohlrabi, radish, rutabaga and turnip, are susceptible to clubroot, as are many cruciferous weeds, for example, wild mustard, stinkweed and shepherd's purse.

Appearance

As the name of this disease suggests, roots of infected plants may exhibit a club-like appearance. However, overall symptoms will vary depending on the growth stage of the crop when it becomes infected. Infection at the seedling stage can result in wilting, stunting and yellowing symptoms by the late rosette to early podding stage, while premature ripening or death can be observed in canola or mustard plants nearing maturity. Plants infected at later growth stages may not show wilting, stunting or yellowing, but may still ripen prematurely, and seeds may shrivel, thus reducing yield and quality (oil content).

Commonly confused diseases or disorders

Above-ground symptoms of clubroot may be confused with drought, nutrient deficiencies or other diseases, so suspect plants should be carefully dug from the soil to check for typical clubroot galls on the roots. Swellings of unknown origin called hybridization nodules are occasionally seen on canola roots and can be confused with young clubroot galls. These nodules are more spherical and firmer than clubroot galls and do not decay when mature as clubroot galls do. Exposure to phenoxy herbicides can also result in swellings on lower stems and roots of canola, mustard and cole crop vegetable plants, but these malformations usually lack the large size and lobed appearance of typical clubroot galls.

Causes

Clubroot is caused by a microscopic, soil-borne plant pathogen called *Plasmodiophora brassicae*. The clubroot pathogen is classified as a "Protist", a group of organisms with characteristics of plants, fungi and protozoans. The life cycle of the clubroot pathogen is illustrated at <u>Clubroot disease of canola and mustard</u>.

First found in Alberta

Clubroot was first reported on broccoli, cabbage and cauliflower in a few home gardens in the Edmonton area in the mid-1970s. The first economically important infestation in Alberta was observed on Chinese cabbage in a market garden near Edmonton in 2001. Clubroot was first detected in canola in Alberta in Sturgeon County northwest of Edmonton in 2003.

Effects

Most varieties of canola, mustard and cole crop vegetables currently being grown in Alberta are highly susceptible to clubroot. This disease is capable of significantly reducing yield and quality, and may destroy a crop if infestation levels are high. Swedish researchers found that infestations in canola fields nearing 100% affected plants caused about 50 to 80% yield loss, while infestations of 10 to 20% led to 5 to 10% yield loss. These results are similar to sclerotinia stem rot infection in canola, where a general rule of thumb is that estimated yield loss is half of the percentage of infected stems. A few cases of total crop loss (that is, not worth combining) have been reported in central Alberta.

Soil life

The resting spores of *Plasmodiophora brassicae* are extremely long-lived and may survive in soil for up to 20 years, according to Swedish research. Similar persistence is being reported in Alberta. Resting spore longevity is a key factor contributing to the seriousness of the clubroot disease, especially under short crop rotations. Clubroot is not a phytosanitary issue affecting international trade of canola or mustard.

Methods of spread

In Alberta, clubroot is being spread mainly through soil infested with resting spores. Infested soil can be carried from field to field by farm machinery, especially tillage equipment, and can also be moved by wind and water erosion. Seed of various crops, as well as hay and straw, can also become contaminated with resting spores via dust or earth tag when they are grown in clubroot-infested fields.

Efforts

In spring 2007, clubroot was added as a declared pest to Alberta's <u>Agricultural Pests Act</u> (APA). This act is the legislative authority for the enforcement of control measures for declared pests in Alberta. Annual surveys of canola, mustard and/or cole crop vegetables have been carried out to determine the location of infested fields in the main production areas for these crops, see the map in the next section. Researchers from many agencies, including the University of Alberta, Alberta Agriculture and Forestry and Agriculture and Agri-Food Canada, have many active research projects on clubroot. Private breeding programs have released clubroot-resistant canola varieties for western Canada.

For more information, read the Economic cost of clubroot.

Current state of clubroot in Alberta

By the end of 2018, clubroot was present in 42 municipalities in Alberta, mainly in central Alberta as shown in the 2003-2018 map showing infested municipalities: <u>Cumulative clubroot infestations in Alberta</u>. Clubroot has the potential to spread to and become established in many of the traditional canola-growing areas of western Canada.

In 2014, the first Alberta case of a pathogen shift to overcome current variety resistance was confirmed from diseased areas of a field planted to a resistant variety (observed in 2013). By 2018, there were hundreds of fields with new virulent pathotypes that could overcome our current genetically resistant cultivars.

Clubroot Management Plan

The Clubroot Management Plan's objective is to minimize yield losses due to clubroot and reduce the further spread and buildup of clubroot in canola, mustard and market garden vegetable fields in Alberta.

For more information, read Alberta clubroot management plan.

Regulatory status

Alberta's APA is the legislative authority for the enforcement of control measures for declared pests.

The Minister of Alberta Agriculture and Forestry is responsible for this act; however, enforcement is the responsibility of provincial municipalities. Agricultural Fieldmen are responsible for enforcing pest control measures in their respective municipalities.

Clubroot was added as a declared pest to the APA in April 2007.

Pest inspectors may be appointed by the local municipality or by the Minister of Agriculture and Forestry. Agricultural Fieldmen are pest inspectors under the APA. Inspectors have the power to enter land at a reasonable hour, without permission, to inspect for pests and collect samples. Check the <u>Association of Alberta Agricultural Fieldmen</u> website for a contact list of Agricultural Fieldmen and assistants in Alberta.

The owner or occupant of land has the responsibility of taking measures to prevent the establishment of any pest on land, property and livestock and to control or destroy all pests in the land or property.

Control measures for clubroot are specified in this management plan. It is important to understand that these control measures represent an acceptable standard that is to be applied in all municipalities across the province. Municipalities can enhance the standard within their own jurisdictions.

Factors favouring clubroot's spread in Alberta

Resting spores can be spread from field to field via contaminated soil on agricultural, petroleum industry and construction equipment and machinery. Soil tillage equipment represents the greatest risk of spreading the disease as soil is frequently carried on shovels, discs, openers, frames and tires. Clubroot surveys in Alberta have found that most new infestations begin at or near the field access, which indicates that contaminated equipment is the predominant spread mechanism.

Other secondary methods of spread could include movement of soil with water or wind and as soil attached to seed (earth tag), hay, straw or greenfeed.

Resting spores are extremely long-lived. It was traditionally understood that the spores had a half-life of about 4 years, but may survive in soil for up to 20 years. Recent studies have suggested that rather than a half-life there may be a more rapid decline in spore viability in the first 2 years without a host, followed by a slow decline for up to 20 years. Regardless of the kinetics of spore decline, the longevity of the resting spores is a key factor contributing to the seriousness of the disease, especially under tight canola rotations.

All land users, including growers, custom agricultural services, oil and gas industry operators, construction and transportation companies, recreational vehicle users, etcetera, need to continue their diligence in removing potentially contaminated soil from vehicles, machines and equipment prior to leaving fields. The removal is crucial to prevent the movement and introduction of clubroot to clean fields and to reduce the widespread distribution of spores within infested fields. Widespread resting spores and frequent exposure to resistant varieties will accelerate changes in the pathogen populations to strains that are not controlled by resistance in current clubroot-resistant canola varieties.

Management plan rationale

Clubroot in Alberta is managed through a proactive program that utilizes and prolongs the durability of clubroot-resistant canola varieties in combination with continuing efforts to prevent the further spread of this pathogen in the province. The program includes both an industry/public awareness program and a disease management plan.

The long-term goal of this management plan is to minimize canola yields losses through the judicious use of resistant varieties and to reduce the further spread of clubroot in Alberta.

Best management practices

- 1. Use clubroot-resistant varieties when growing canola in areas where the disease is established. Alternate growing clubroot-resistant varieties with different sources of resistance when they become available.
- 2. Although crop rotation will not prevent introduction of clubroot to clean fields, the practice will lower subsequent disease buildup and severity and reduce other diseases, such as blackleg. Crop rotation will not eradicate the clubroot pathogen from the soil. A minimum of a 2-year break from all clubroot-susceptible hosts is recommended for all producers. A longer break may be required if clubroot is well-established, or

- a Notice to Control is issued by the local authority. Canola growers in high-risk situations (confirmed clubroot in the field or area) should follow traditional canola rotation recommendations (one canola crop every 4 years) using clubroot resistant varieties. The one- in 4-year rotation recommendation using resistant varieties is designed to slow down pathogen population shifts. There have been numerous reports in Alberta of pathogen population shifts to a strains not controlled by clubroot-resistant canola. This has occurred many times in other parts of the world in canola and cole crops.
- 3. Growing a clubroot-resistant variety in fields without known clubroot but in areas where the disease is prevalent can help slow the establishment of the disease. Since there would be low spore numbers when clubroot does get introduced to the field, this approach should not significantly induce changes in the strains to those that are not controlled by the variety resistance. The greatest pressure to alter the pathogen strains is frequent exposure (rotation length) of the same resistance to high soil spore populations (distinct clubroot patches have occurred in the field).
- 4. Volunteer canola and cruciferous weeds must be controlled in infested fields to prevent more than 3 weeks of growth, to avoid the production of new resting spores on these host plants.
- 5. Practice good sanitation (cleaning and disinfection) of machinery and equipment to restrict the movement of potentially contaminated soil. This approach will also help reduce the spread of other diseases, insects and weed seeds. Resting spores can be spread via contaminated soil. Moderate to high infestations will leave high spore concentrations in soil on field machinery, thus sanitation is very important in these situations. All producers should follow the practice of cleaning soil and crop debris from field equipment before transport from all fields. The most critical step in cleaning equipment is physical dirt removal knocking or scraping off soil lumps and sweeping off loose soil.
 - For risk-averse producers or with heavy infestations, there are additional cleaning steps, with diminishing returns on investment, that will slightly decrease the risk of spread, but will involve considerably more work and expense:
 - After removal of soil lumps, wash equipment with a power washer, finish by misting equipment with disinfectant. Recommended products include 2% active ingredient bleach solution, Spray Nine, Adhere, Premise and AES 2500. The use of a disinfectant without first removing soil is not recommended because soil inactivates most disinfectants. A 20 to 30-minute wet period is recommended for good efficacy. For more information on disinfecting equipment for clubroot prevention see the fact sheet Preventing Clubroot: Agricultural Sanitization.
 - Disinfectant footbaths can be an effective first line of defence in a biosecurity program. However, footbaths are not able to completely eliminate biosecurity risks in all situations. Disposable foot coverings should be utilized where possible and in combination with a foot bath to more fully minimize biosecurity risks associated with soil-borne diseases like clubroot. For more information on how to develop a comprehensive biosecurity plan for a farm or business, see the Canadian Food Inspection Agency's National Voluntary Farm-Level Biosecurity Standard for the Grains and Oilseeds Industry.
- 6. Seed and establish an area with grass near the field exit. A well-sodded grass will retain soil removed during equipment cleaning without creating a mud hole after washing and thus will reduce the reintroduction of infested mud to wheels when moving from this area to the exit. The grass area will not be susceptible to clubroot if volunteer canola and mustard weed species are controlled.
- 7. Use direct seeding and other soil conservation practices to reduce erosion. Resting spores can also readily move in soil transported by wind or water erosion. Reducing the amount of tillage on any given field will

reduce the spread of the organism within the field and to other fields.

- 8. Minimize vehicle and equipment traffic to and from fields.
- 9. In situations where fields are lightly infested only near the current access, create a new exit at another distant edge of the field if possible.
- 10. Scout canola fields regularly and carefully. Identify causes of wilting, stunting, yellowing and premature ripening do not assume anything!
- 11. Avoid the use of straw, hay or greenfeed, silage and manure from infested or suspicious areas. Clubroot spores may survive through the digestive tracts of livestock.
- 12. Avoid common untreated seed (including canola, cereals and pulses). Earth tag on seed from infested fields could introduce resting spores to clean fields. The effect of current seed treatment fungicides on resting spore viability on seed is currently being studied.

Responsibilities

Alberta Agriculture and Forestry (AF)

The Plant and Bee Health Surveillance Section of AF will coordinate the Alberta Clubroot Management Plan and do the following:

- · Provide regulatory consultation and training.
- Prepare and provide technical information on clubroot control recommendations and variety resistance stewardship to inspectors and others in the field.
- Assist in educating the agriculture industry, oil industry and general public about clubroot and the threat it represents to Alberta.
- Inform other industry sectors, such as the agricultural retail industry, environmental companies, custom applicators, petroleum, construction and transportation industries, and landscaping companies, about equipment sanitation requirements to reduce clubroot spread within and between municipalities.

Agricultural Service Boards (ASBs)

ASBs will provide support and resources to the Agricultural Fieldmen in carrying out their duties. The Agricultural Fieldmen will do the following:

- Actively survey for clubroot if canola or mustard is being grown in their municipality follow-up surveys
 on infested land should be conducted to monitor for resistance breakdown in newly introduced resistant
 canola varieties.
- Provide recommendations and information to farmers on clubroot prevention and management, especially
 the stewardship of variety resistance.
- Enforce control measures as necessary to meet the objectives of the Alberta Clubroot Management Plan.
- Maintain records of infestations and provide information on infested land locations to potential land renters, landowners, oil and gas companies and other parties with a financial interest, under provisions of the APA and the Pest and Nuisance Control Regulation (Section 10).
- Assist in educating the Alberta agriculture industry about clubroot and the threat it represents to Alberta.

Landowners/occupants

- Take measures such as vehicle and equipment sanitation as well as proper crop rotation to prevent the establishment of clubroot on their land and to minimize the spread of clubroot to other land or property.
- Grow resistant varieties when clubroot is present or is known to be present in the area and follow a 4-year rotation to deter resistance breakdown.
- Observe and follow all management practices to meet the objectives of the Alberta Clubroot Management Plan.

Agricultural retail and service industry (pesticide/fertilizer retailers, custom equipment leasing, consulting agronomists, Canola Council of Canada)

- Take measures such as equipment cleaning and disinfection to prevent the establishment of clubroot and to minimize the spread of clubroot to other land and property.
- Assist in educating the agriculture industry about clubroot, the threat it represents to Alberta and the value of extended rotations for minimizing variety resistance breakdown.

Custom equipment operators

- Take measures such as equipment sanitation to prevent disease establishment and to minimize the spread of clubroot to other land and property.
- Assist in educating producers and others in the agriculture industry about clubroot and the threat it represents to Alberta's canola industry.

Energy (oil, gas, pipeline, seismic), construction (earthmoving, landscaping) and transportation (trucking) companies operating on agricultural land

- Take measures to prevent disease establishment and to minimize the further spread of clubroot to other land and property examples of such measures include the following:
 - o clean equipment when leaving infested sites or areas
 - o remove/stockpile topsoil on leases with clubroot before moving other equipment on-site
 - o avoid equipment traffic during wet conditions in infested areas
- Assist in educating the petroleum, construction and transportation industries about clubroot and the threat it represents to agriculture in Alberta.

Researchers

- Conduct research to increase understanding of clubroot biology and management.
- Communicate research findings to extension personnel and other stakeholders.
- Serve as scientific advisors to the Clubroot Management Committee.
- Make recommendations to producers and the agricultural service industry, as needed, based on scientific knowledge and experimental evidence.

Clubroot Management Committee

- Provide a forum to represent the interests and views of the agriculture and oil and gas industries in Alberta and western Canada regarding the management of clubroot.
- Recommend management strategies for clubroot for inclusion in the Alberta Clubroot Management Plan.

- Assist in educating the agriculture, oil and gas industries in western Canada about clubroot and the threat it represents to canola and cole crop production.
- Evaluate and revise the Alberta Clubroot Management Plan as required.

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REQUEST FOR DECISION

SUBJECT: Greenview Shelterbelt Program

SUBMISSION TO: AGRICULTURAL SERVICES BOARD REVIEWED AND APPROVED FOR SUBMISSION

MEETING DATE: June 23, 2021 CAO: MANAGER: SK DEPARTMENT: AGRICULTURE DCAO SW PRESENTER: SK

STRATEGIC PLAN: Level of Service

RELEVANT LEGISLATION:

Provincial (cite) - N/A

Council Bylaw/Policy (cite) – N/A

RECOMMENDED ACTION:

MOTION: That the Agricultural Service Board recommend to Council to direct administration to establish a cost recovery shelterbelt program for the 2022 calendar year.

BACKGROUND/PROPOSAL:

Canada had a federally delivered shelterbelt program, the program was established in Indian Head, Saskatchewan in 1901 to provide agricultural producers with seedlings from the Prairie Farm Rehabilitation Administration (PFRA). In 2013, the federal government discontinued the century old program upon the recommendation of Federal Minister of Agriculture, Garry Ritz.

Since this time, many municipalities have established shelterbelt programs to offer reasonably priced seedlings to rural residents for the purpose of windbreak, privacy screenings, riparian projects, and wildlife attraction. Administration is frequently asked if a shelterbelt program will be established within Greenview.

Due to requests, and to provide a valuable service to Greenview residents, Administration recommends the development of a cost recovery shelterbelt program for delivery to commence in the 2022 calendar year. Applicants will submit their application along with the payment to the Greenview Agricultural Services Office, therefore Greenview will not have a cost associated to administer this program.

BENEFITS OF THE RECOMMENDED ACTION:

The benefit of the recommended action is that Greenview will have a shelterbelt program established
to assist rural residents with windbreak, privacy screening, riparian projects and the attraction of
wildlife.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended action.

ALTERNATIVES CONSIDERED:

Alternative #1: The Agricultural Service Board has the alternative to alter or deny the recommended motion.

FINANCIAL IMPLICATION:

As the program would be administered on a cost-recovery basis, there are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no additional staffing implications for the proposed Shelterbelt Program as the labour requirement can be managed through existing compliment of staff.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

Administration will proceed if the Board is in approval of this initiative.

ATTACHMENT(S):

- Draft Order Form
- Draft "Quick Facts" document



SHELTERBELT PROGRAM Order Form

ALL ORDERS BY BUNDLE \$1.25 PER SEEDLING	# PER BUNDLE	\$ Per Bundle	TOTAL Bundles	Cost
Lodgepole Pine (14cm-35cm)	15	\$18.75		
White Spruce (>12cm)	15	\$18.75		
Colorado Spruce (>15cm)	15	\$18.75		
Chokecherry (>15cm)	10	\$12.50		
Siberian Larch (>15cm)	10	\$12.50		
Bebbs Willow (>15cm)	10	\$12.50		
Golden Willow (>20cm)	10	\$12.50		
Pussy Willow (>10 cm)	10	\$12.50		
Hybrid Poplar (>17 cm)	10	\$12.50		
Lilac (>15cm)	10	\$12.50		
Green Alder (>15cm)	10	\$12.50		
Dwarf Birch (>20cm)	10	\$12.50		
Prickly Rose (<10cm)	10	\$12.50		
Trembling Aspen (>10 cm)	10	\$12.50		
High Bush Cranberry (>30cm)	10	\$12.50		
Blueberry (>15cm)	10	\$12.50		
Red Osier Dogwood (>20cm)	10	\$12.50		
Canadian Buffaloberry	10	\$12.50		
G.S.T. INCLUDED IN ALL PRICES			Total:	

Name:	
Address:	
Phone #:	
Email:	
LLD:	

IMPORTANT: Payment due when the order is placed. Pick-up date will be communicated through mail/email. Payment may be made by cash or cheque at the Greenview Agricultural Services Office. Please make every effort to pick up your trees, unless prior arrangements have been made, orders not picked up will be distributed at the Managers discretion.



Shelterbelt Species Quick Facts

2020

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COLORADO SPRUCE: People are attracted to the distinctive blue-green color of this hardy evergreen. But Colorado spruce really stands out because it is tough, long lived, and adapted to a wide range of growing conditions. Colorado Spruce trees are ideally suited for use in shelterbelts, privacy screens, or as accent trees.

Zone: 2a Height: 27 m (90 ft)
Spread: 6 m (20 ft) Moisture: dry, normal
Light: full sun Growth rate: slow
Life span: 80 years + Maintenance: low

Suckering: none Pollution tolerance: high

In row spacing: 3 - 4 m (10 - 12 ft) Between row spacing: 5 m (16 ft)

Other names: blue spruce, colorado blue spruce





HYBRID POPLAR: An excellent shelterbelt tree. It's one of the hardiest and fastest growing trees you can plant on the prairies. This hybrid poplar is disease resistant, drought and cold tolerant, and requires little maintenance. Hybrid poplar also makes for a good privacy screen on larger properties.

Zone: 2a

Moisture: any
Fuzz/fluff: no
Maintenance: low

Height: 18 m (60 ft)
Light: full sun
Fall colour: yellow
Suckering: high

Pollution tolerance: high

Height: 25 m (82 ft)

Growth rate: fast

Maintenance: low

Moisture: dry, normal

Spread: 8 m (26 ft) Hybrid: yes Growth rate: fast

TREMBLING ASPEN: Trembling Aspen is a hardy, fast-growing tree. It is known for its unique "trembling" leaf movement and beautiful bark that whitens with age. This native shade tree tolerates a range of growing conditions and requires little maintenance.

Zone: 1a Spread: 9 m (27 ft) Light: full sun Life span: short Suckering: high

Pollution tolerance: low

In row spacing: 3 m (10 ft)

Between row spacing: 5 m (16 ft)

GOLDEN WILLOW: an attractive accent tree that's perfectly suited for those moist or wet areas on your property. This fast growing tree has glossy narrow leaves that turn gold in fall, furrowed brown bark and showy gold branches. Golden Willow is commonly used for windbreaks, shelterbelts, and ornamental planting. In addition to looking great, Golden Willow attracts a variety of birds and mammals with its twigs and buds.

Zone: 2a **Height:** 15 m (49 ft) **Spread**: 15 m (50 ft) **Moisture**: normal, wet

Light: full sun **Fuzz/fluff**: yes

Catkins: yes Fall colour: golden yellow

Growth rate: fast Life span: medium Maintenance: low Suckering: medium

Pollution tolerance: high In row spacing: 2.4 - 3 m (8 - 10 ft)

Between row spacing: 5 m (16 ft)

Bark: new shoots (growth) are bright yellow on the plant giving it a nice fall/winter appeal

Note: do not plant near buildings or buried services.

LILAC: Common Purple Lilac is a popular lilac. This large shrub provides excellent privacy or wind protection in an attractive package. Lilac flowers are pleasantly fragrant and add a beautiful lavender colour to your property. Common Purple Lilac is cold hardy, easy to grow, and can tolerate most soil types. Some people alternate villosa and common purple lilacs to create the impression that the hedge is in flower for almost a full month with the common purple flowering about 2 weeks sooner than the Villosa Lilac.

Zone: 2a Height: 5 m (16 ft)
Spread: 3 m (10 ft) Moisture: dry, normal
Light: full sun Fall colour: yellow

Flowers: fragrant purple clusters

Growth rate: medium
Maintenance: low
Life span: medium
Suckering: low

Pollution tolerance: high

In row spacing: 0.9 m (3 ft)
Between row spacing: 5 m (16 ft)



WHITE SPRUCE: White Spruce is a hardy, long-lived evergreen tree. It can grow in many soil types and moisture levels. And it can even tolerate significant amounts of shade. White spruce requires little maintenance and is well suited for use in shelterbelts, privacy screens, hedges, and as an ornamental in an urban setting.

Zone: 1a Height: 25 m (82 ft)
Spread: 6 m (20 ft) Moisture: dry, normal

Light: partial shade, full sun

Growth rate: medium Life span: 70 years + Suckering: none

Pollution tolerance: medium

In row spacing: 3 m (10 ft)

Between row spacing: 5 m (16 ft)



Other names: alberta white spruce, canadian spruce, cat spruce, labrador spruce, northern spruce, pasture spruce, porsild spruce, skunk spruce, western white spruce

SIBERIAN LARCH: Siberian Larch is a large, cold hardy conifer. Like the Tamarack, its needles turn golden yellow and drop in the fall, and it is able to handle saturated soils. If you are looking for a long-lived tree for your large property or shelterbelt with quite wet soil, this is the tree for you. This variety is often used on the South side of a shelterbelt to let sunlight in during the winter and to provide protection or shading during the summer.

Zone: 1b
Spread: 8 m (25 ft)
Light: partial shade, full sun
Fall colour: yellow needles
Maintenance: low
Height: 20 m (66 ft)
Moisture: normal, wet
Growth rate: slow
Life span: medium
Suckering: none

Pollution tolerance: low

Other names: altaian larch, russian larch



RED OSIER DOGWOOD: Red Osier Dogwood is a small deciduous shrub that features deep red stems and twigs year-round, with creamy white flowers in the spring. It is a complementary space filler to any shrub and flower garden, and mixes well with Yellow Twig Dogwood. Red Osier Dogwood is an excellent soil stabilizer. It is also fast growing and becomes drought tolerant once well

Zone: 2a Height: 2.7 m (9 ft)
Spread: 1.8 m (6 ft) Moisture: normal, wet
Light: partial shade, full sun
Growth rate: fast Life span: medium
Maintenance: low Suckering: medium

Pollution tolerance: high

Berries: small white berries (5-9 mm diameter)

Flowers: dull white flowers in spring

Bark: branches and twigs are dark red giving it a

distinct look in the fall/winter In row spacing: 0.9 m (3 ft) Between row spacing: 5 m (16 ft)



LODGEPOLE PINE: Lodgepole pine is well suited to western Canada's climate and growing conditions. This native pine noted for its rapid growth among evergreen. And as one of Canada's hardiest conifers, it can tolerate cold, shade, drought, and poor soil conditions.

Zone: 1a Height: 30 m (98 ft)
Spread: 6 m (20 ft) Moisture: dry, normal
Light: full sun Growth rate: fast

Suckering: none Pollution tolerance: medium

In row spacing: 3 - 4 m (10 - 12 ft) Between row spacing: 5 m (16 ft)



BEBBS WILLOW: This large shrub is native to all of Canada and most of the United States. Its leaves are green on the top and grey on the bottom, and it produces catkin based flowers and non-edible fruit which appears very similar to a group of pine needles. Bebb's Willow is foraged for by many species including elk, hares, beavers and various birds. It is commonly used to prevent erosion and protect aquatic environments due to its preference for shady, moist environments.



Zone: 1a Height: 5 m (15 ft) Spread: 3 m (10 ft) Moisture: normal, wet

Fuzz/fluff: no Light: partial shade, full sun

Catkins: yes Growth rate: fast

Life span: short In row spacing: 2 - 3 m (5 - 10 ft) Between row spacing: 5 m (16 ft)

HIGHBUSH CRANBERRY: Produces attractive white flowers in late June and bears edible fruit that matures to a bright red colour in the late summer. This shrub, native to much of Canada, is fast growing, and its fruit can be eaten raw or cooked into a sauce to serve with various proteins.

Zone: 2a **Height:** 4 m (13 ft) **Spread:** 2.7 m (9 ft)

Moisture: normal Light: partial shade, full sun

Fall colour: red Growth rate: medium Life span: medium Maintenance: low

Suckering: none Pollution tolerance: high

Between row spacing: 5 m (16 ft) In row spacing: 0.6 m (2.0 ft)



PUSSY WILLOW: Pussy Willow is a large shrub or small tree that produces catkins that are soft, silky, and silvery before leaves appear in the spring. This native willow prefers moist to wet soil. Pussy Willow makes a beautiful accent tree, and its bright branches can be used for floral arrangements or basket making.

All willow are important to native pollinators each spring as they have higher amounts of pollen and nectar early each growing season when other food sources are scarce.



Zone: 2a Height: 7 m **Moisture**: any Catkins: yes Growth rate: fast

Light: partial shade, full sun Fuzz/fluff: yes Pollution tolerance: medium

Maintenance: low Suckering: medium

WILD BLUEBERRY: Common Wild Blueberry is a must-have for anyone who appreciates the tasty little berries as much as we do. These blueberries are grown from locally collected seed and produce small, sweet berries in August. The fruit is terrific for fresh eating and cooking. We suggest you plant these in a low pH (acidic) soil location as they won't perform well in neutral or high pH soils. We are not experts at this as we have natura I stands that we collect from. So we suggest you do further research.

Zone: 1a **Height**: 0.5 m (1.5 ft) Moisture: dry, normal **Spread:** 0.5 m (1.5 ft) Light: partial shade, full sun Growth rate: medium Maintenance: low Suckering: none

Pollution tolerance: medium



Height: 7 m (23 ft)



CHOKECHERRY: Chokecherry is a shrub or small tree commonly used for farmstead and field windbreaks. It produces white flowers in the spring and edible dark purple fruit that matures between September and October. Its cherries are great for making for making jams and jellies (or wine) but are not very palatable for raw eating.

Zone: 2a

Moisture: any **Spread**: 5 m (16 ft)

Light: any Flowers: white

Growth rate: fast Maintenance: medium Suckering: medium Pollution tolerance: high **GREEN ALDER**: Green Alder is a cold hardy, native shrub. It is often planted on infertile sites so it can fix nitrogen from the air and improve the soil quality. Green Alder is known for its smooth grey bark and attractive shiny green leaves; it is commonly used in reclamation.

Zone: 1a

Spread: 3 m (9 ft) Light: any

Growth rate: fast Suckering: medium

In row spacing: 0.9 m (3 ft)

Between row spacing: 5 m (16 ft)

Height: 7 m (23 ft)
Moisture: any
Flowers: white

Maintenance: medium Pollution tolerance: high

Life Span: 50 yrs





DWARF BIRCH: Dwarf Birch, also known as Bog Birch for its common occurrence in wet areas, is a small deciduous shrub native to North America. Common in riparian zones and boreal forests across Western Canada. It is a common reclamation species. This species is often used by local artisans to twist into shapes like willow and make decorative hearts, circles,

Zone: 2a

Spread: 1.2 m (4 ft) Light: full sun

Growth rate: fast **Suckering**: none

Height: 2.4 m (8 ft)
Moisture: normal, wet
Fall colour: red-orange
Maintenance: low

PRICKLY ROSE: Alberta's provincial flower, Alberta Wild Rose, is a small, deciduous shrub known for its beautiful pink blooms and thick, thorny stems. Native to Canada, this hardy perennial is an attractive addition to any garden. Wildlife enjoy its edible rosehips, which inclined growers can use in jams, jellies, and rose hips.

Zone: 1a

Spread: 1.5 m (5 ft)

Light: any

Growth rate: medium

Maintenance: low

Height: 2.1 m (7 ft)

Moisture: normal

Fall colour: bright red

Life span: medium

Suckering: medium

Pollution tolerance: medium

Flowers: pink, blooms between May and June. Flowers are

both male and female





REQUEST FOR DECISION

SUBJECT: Beaver Harvest Program

SUBMISSION TO: AGRICULTURAL SERVICES BOARD REVIEWED AND APPROVED FOR SUBMISSION MEETING DATE: June 23, 2021 CAO: MANAGER: SK DEPARTMENT: AGRICULTURE GM: PRESENTER: SK

STRATEGIC PLAN: Level of Service

RELEVANT LEGISLATION:

Provincial (cite) - N/A

Council Bylaw/Policy (cite) – Policy 6321 – Beaver Harvest Program

RECOMMENDED ACTION:

MOTION: That the Agricultural Service Board accept the Beaver Harvest Program Report for information, as presented.

BACKGROUND/PROPOSAL:

As of June 17th, 2021 the Beaver Harvest Program has resulted in 405 beavers submitted for bounty, a total of 500 beaver was anticipated to be received for the entire year. Administration has been contacted by incentive participants to be prepared for two separate submissions of 20+ carcasses soon. Administration has learned that a private business collector paying \$20.00 for each beaver submitted has stopped accepting them as they have received more than they require.

Administration will be seeking the implementation of a collection limit to the Beaver Harvest Program from Council. This will help guide administration in delivery of the program and ease budget preparation. Administration further plans to recommend adoption of a control on the hunting incentive programs in general, requiring individuals to supply a digital photo of the harvest site with GPS coordinates to guard against instances of potentially fraudulent submissions.

If the Agricultural Service Board is in favor of these recommendations a draft of the changes to the Harvest Incentive Programs will be presented for Council at a future meeting.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the Agricultural Service Board accepting the recommended motion is that the Board may be informed of possible measures and controls that may be implemented within the Harvest Incentive Programs.

DISADVANTAGES OF THE RECOMMENDED ACTION:

There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: The Agricultural Service Board has the alternative to alter or deny the recommended motion.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS: N/A

ATTACHMENT(S):

Policy 6321 - Beaver Harvest Program

Title: Beaver Harvest Program

Policy No: 6321

Effective Date: July 13, 2020

Motion Number: 20.07.385

Supersedes Policy No: NONE

Review Date: July 13, 2023



Purpose: Greenview is committed to protecting municipal infrastructure from water movement problems related to beaver activity. Greenview will implement the policy and procedures to provide for the harvest of beavers and/or removal of beaver dams, for the purpose of preventing damage to infrastructure and flooding caused by beavers.

1. DEFINITIONS

1.1 Greenview means the Municipal District of Greenview No. 16

2. POLICY STATEMENT

- 2.1 Greenview Administration shall prioritize the harvesting of beaver and/or removal of beaver dams in the following order:
 - a) Areas that occur on Greenview land and cause operational and/or structural integrity issues to municipal infrastructure (i.e., roads, bridges, culverts etc.), at no cost.
 - b) Areas that occur on Greenview land that is currently or has the potential to cause damage/flooding to private land such as yard sites and agricultural crops and pasture land, at no cost.
 - c) Areas that occur on drainage ditches registered by Greenview to prevent flooding of agricultural land, at no cost and with landowner authorization as per policy procedure.
- 2.2 Greenview shall hold a valid Damage Control License authorizing the removal of beavers.
- 2.3 Greenview shall implement a Beaver Harvest Incentive Program that will pay a bounty of (\$30.00) thirty dollars for each beaver harvested by a ratepayer or resident within the municipal boundaries of Greenview in accordance with policy procedure. Problem Wildlife personnel employed or specifically contracted by Greenview are exempt from this program.
- 2.4 Greenview will maintain a license authorizing the appropriate handling and use of explosives for the purpose of blasting beaver dams (i.e., licensed magazine, certified blaster).
- 2.5 Landowners with beaver issues on private land (i.e., agricultural crop and pasture lands, yards etc.) are encouraged to rectify the issue independently.

3. PROCEDURE

3.1. All beaver dam removal on designated watercourses must comply with all relevant acts (i.e., Fisheries Act, Alberta's Water Act, Public Lands Act etc.).

- 3.2. The Manager of Agricultural Services, or their designate, shall work with internal departments and the public on prioritizing the harvesting and/or removal of beaver dams in accordance with section 2.1 of this policy.
- 3.3. The Manager of Agricultural Services, or their designate, shall ensure the delivery of the Beaver Harvest Incentive Program.
- 3.4. Beavers harvested under the Beaver Harvest Incentive Program will be compensated upon a signed declaration of the following:
 - a) The legal land location where the beaver was harvested.
 - b) The date of harvest.
 - c) The harvest was conducted in a lawful manner, in accordance with current legislation.
 - d) The participant had permission to harvest on said land.
 - e) The beaver tail is marked by a Greenview employee, in the presence of the individual who harvested the animal.
- 3.5. Disposal of all beavers submitted under the Beaver Harvest Incentive Program will the responsibility of the person submitting the carcass/tail after proper submission procedures have taken place.



MUNICIPAL DISTRICT OF GREENVIEW No. 16

Manager's Report

Department: Agricultural Service Board

Submitted by: Sheila Kaus, Manager, Agricultural Services

Date: 6/23/2021

June is here and with that, the hectic control and inspection season has begun. The weather has not cooperated to this point for spraying but all transfer sites have been controlled for bareground, Greenview yards in Valleyview have been controlled and 47 acres or 25 ha have been sprayed for roadside. The County of Grande Prairie has agreed to allow Greenview's spray crew to fill the spray truck in their yard. This will increase the crews efficiency substantially and highlights the intermunicipal goodwill between the two municipalities.

Inspections are moving along steadily, with an increased focus on customer service and communication. Landowners are responding positively to inspectors reaching out by phone to talk to them, offering assistance and inviting participation in the Tall Buttercup/Burdock Incentive program and private spray requests of 2 acres or less for infestations at or under that area. Spraying and other control work has commenced on privately held land in areas of concern after phone calls from Greenview weed inspectors and administration to discuss these established infestations.

Administration hopes to finalize a demonstration site for Tall Buttercup/Burdock Incentive Program approved herbicides in the very near future. Once approved and implemented, signage for the respective herbicides will be displayed next to an untreated control strip. In other demonstration sites, Administration is looking into a potential demonstration using a plane to spray a pasture. While known for annual crop spraying, planes are effective for pasture controls and can be cost effective.

Clubroot compliance inspections have almost wrapped up. Two fields have been found to be planted to canola within fields that were recorded with a positive clubroot detection. Neither of these properties were issued a Pest Notice when discovered, thus a Pest Notice will be issued this season, once revisions to Policy 6308: Clubroot of Canola have been completed, moving forward notices will be issued in a timely manner.

The policy states the producers will be permitted to harvest the crop in the year they are issued a pest notice.

The rental equipment has been very active to-date with over 122.5 rental days from May 1st – June 17th.

PEST AND NUISANCE CONTROL

Up to June 17th, 39 wolves have been presented for payment in 2021.

YEAR	WOLVES	AMOUNT
2019	56	\$16,800.00
2020	114	\$34,200.00
2021	39	\$11,700.00
Total	187	\$62,700.00

Up to June 17th, 420 beavers have been presented for payment in 2021.

YEAR	BEAVER	AMOUNT
2020	102	\$3,060.00
2021	420	\$12,600.00
Total	522	\$15,660.00

Up to May 17th, Problem Wildlife Work Orders.

File Status	Beaver- MD	Beaver- Ratepayer	Customer Service	Predation	TOTAL
Open					0
Monitor	8	9			17
Closed	6	10	3	3	22
TOTALS	14	19	3	3	39

Open: Not assessed

Monitor: Still trapping or dam

outstanding

Closed: All problem wildlife removed, dam removed

Over 100 beaver removed

VSI QUARTERLY REPORTS AND SERVICE BREAKDOWN

The next quarterly report for VSI will be received in September, 2021.

	Q1	Q2	Q3	Q4	TOTAL
2019	\$23,601.95	\$28,434.47	\$4,462.31	\$40,241.32	\$93,159.73
2020	\$21,172.35	\$28,434.47	\$8,342.09	\$34,001.80	\$100,085.64
2021	\$19,269.87				

Semen Tests

#claims	id#	amount
21	60	\$ 1,144.50
108	61	\$ 4,163.40
54	62	\$ 1,898.10
5	65	\$ 63.50
188		\$ 7,269.50

Pregnancy tests

#claims	id#	amount
1382	6	\$ 3,869.60

C-sections

#claims	id#	amount
8	41	\$ 2,179.20



REQUEST FOR DECISION

SUBJECT: Correspondence

SUBMISSION TO: AGRICULTURAL SERVICES BOARD REVIEWED AND APPROVED FOR SUBMISSION MEETING DATE: June 23, 2021 CAO: MANAGER: SK DEPARTMENT: AGRICULTURE GM: PRESENTER:

STRATEGIC PLAN: Level of Service LEG:

RELEVANT LEGISLATION:

Provincial (cite) - N/A

Council Bylaw/Policy (cite) - N/A

RECOMMENDED ACTION:

MOTION: That the Agricultural Service Board accept the correspondence as information.

BACKGROUND/PROPOSAL:

May 14th County of Grande Prairie letter: Speaking to the cuts in ASB Grant funding and the download of agriculturally related issues.

May 18th, May 25th, June 1st, June 8th Crop Report: Most current- Seeding nearing completion but hay rated lower than ten-year average.

May 26^{th} -June 8^{th} ; Precipitation received; Precipitation accumulated: Some areas receiving very little precipitation over the time period.

May 31st ASB Resolution Grading: the outcome of lobbying efforts for resolutions put forward at the 2021 Provincial ASB Conference.

June 16th Brazeau County letter: Voicing displeasure at the federal synthetic fertilizer CO2 emission targets coupled with the federal goal of increasing biofuel production and export. Federal government seeking increased crop production but limiting important tool in achieving increased production.

BENEFITS OF THE RECOMMENDED ACTION:

1. The benefit of the Agricultural Service Board accepting the recommended motion is that the Board will be made aware of the correspondence received within the agricultural community throughout the Province.

DISADVANTAGES OF THE RECOMMENDED ACTION:

1. There are no perceived disadvantages to the recommended motion.

ALTERNATIVES CONSIDERED:

Alternative #1: The Agricultural Service Board has the alternative to alter or deny the recommended motion.

FINANCIAL IMPLICATION:

There are no financial implications to the recommended motion.

STAFFING IMPLICATION:

There are no staffing implications to the recommended motion.

PUBLIC ENGAGEMENT LEVEL:

Greenview has adopted the IAP2 Framework for public consultation.

INCREASING LEVEL OF PUBLIC IMPACT

Inform

PUBLIC PARTICIPATION GOAL

Inform - To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.

PROMISE TO THE PUBLIC

Inform - We will keep you informed.

FOLLOW UP ACTIONS:

There are no follow up actions to the recommended motion.

ATTACHMENT(S):

- Municipal District of Willow Creek; Provincial ASB Resolution Session
- May 11th Crop Report
- 2021 Alberta Fusarium Management Plan
- 2020 Provincial Wheat Head Survey Results
- April 13-26th Precipitation Accumulation
- April 13-26th Precipitation Received



May 14, 2021

The Honourable Devin Dreeshan Minister of Agriculture and Forestry 229 Legislature Building 10800 - 97 Avenue NW Edmonton, AB T5K 2B6

Dear Minister Dreeshan,

The Council for the County of Grande Prairie, along with their Agricultural Service Board would like to draw your attention to some matters of concern.

In 1945, the first Agricultural Service Board was appointed to address agricultural concerns specific to the municipality it operated in. Today there are 69 ASBs currently serving the needs of their agricultural producers in virtually every municipality in Alberta. ASBs serve both the province and agricultural producers by bearing the responsibility for the administration of the Weed Act, the Pest Act, and the Soil Conservation Act of Alberta.

The work does not stop there. Municipal departments participate in weed, pest, and disease surveys each year, provide assistance to Alberta Agriculture and Forestry staff, provide support to the province for the Line Fence Act, the Provincial Vet if there is a livestock disease outbreak, and sundry other tasks. We also serve as a "go-to" for producers and ratepayers who have agricultural related questions that cannot be answered by Alberta Agriculture and Forestry staff.

Over the past decade or more, provincial funding for the Agricultural Service Boards that undertake this work on behalf of the municipalities has been stagnant at a maximum of \$150,000 per year, with an additional \$18,000 made available at times. In 2020, this funding was reduced to \$123,907 per year for the next five years, while the activities required to maintain eligibility were not reduced.

The reduction in funds comes while more tasks are being downloaded to our municipal agriculture departments. With the loss of Ropin' the Web, the virtual impossibility of locating the wealth of information formerly contained on that site, as well as the changes made to the 310-FARM telephone line, more and more questions are coming in to our agriculture departments to locate information and answers to questions. The loss of research and specialist staff means resource people formerly available to answer questions are no longer available to assist us in helping residents and producers 310-FARM has gone from being a place to call to reach an expert or specialist to more of a referral to producer groups for information. Producer groups can be an excellent resource, but they may not be as fully well-versed as a subject matter expert, who has a broader base of knowledge to draw from.

While the funding received from the province is greatly appreciated, it in no way begins to cover the costs of the inspections and activities we are required to do to maintain eligibility for our

annual grant. In our municipality alone, wages for seasonal staff hired for weed and pest/disease enforcement is over \$500,000 in addition to supplies, training and capital costs required to support these positions.

We know that our province has spent more on agricultural services than other provinces in the past. Perhaps that is what allowed us to become world leaders in agricultural production, research, and development. To compare other provinces to Alberta agriculturally, and reduce funding accordingly does our province a great disservice. For our province to remain competitive and continue to grow this powerful sector, we need the support of the province this directly benefits.

We understand full well the challenging financial times we operate in. We would like to draw your attention to the fact that agriculture is the backbone of this province. Reducing supports to the vital economic driver Albertans rely on is counterproductive to ensuring we can maintain a viable and thriving industry. By putting increased pressure on municipalities to deliver more with less, you compromise our abilities to undertake the important duties we are tasked with and weaken our ability to properly support our agricultural producers. We request that your government reconsider the amounts provided to municipalities to support the important work the province has tasked us with and provide greater access to subject matter experts to address concerns and questions from our agricultural producers.

Sincerely,

Leanne Beaupre,

Reeve,

County of Grande Prairie No.1

LB/ser

CC: Provincial ASBs County of Grande Prairie Council Joulia Whittleton, CAO Sonja Raven, Agriculture Fieldman

Alberta Crop Report



Crop Conditions as of May 18, 2021

Recent wide spread rains brought moisture to a large area across the middle parts of the province, including the northern and western parts of the Central Region, North West Region, most parts of the North East Region and lower half of the Peace Region. Areas in the Southern Region, the eastern parts of the Central Region, the southeastern parts of the North East Region and the upper half of the Peace Region are still in need of moisture for active growth of crops and forages. However, the snow in the forecast for parts of the southern Alberta should bring some much needed moisture to these lands.

Over the past week, producers across the province benefited from favourable dry and warmer temperatures to advance seeding progress by 38 per cent. Provincially, as of May 18, about 71 per cent of all crops have been seeded, above the 5-year average of 56 per cent and 10-year average of 59 per cent (see Table 1). Regionally, seeding progress is ahead of the 5-year and 10-year averages for all regions (see Figure 1). The North East Region had the most progress over the past week at 45 per cent, followed by the Peace, Central and North West Regions with 41, 40 and 39 per cent progress, respectively. Seeding progress in the Southern Region advanced 27 per cent.

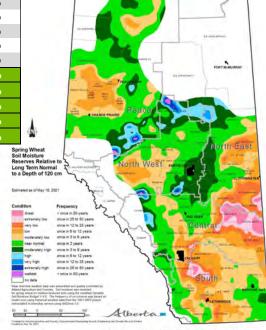
Table 1: Alberta Seeding Progress as of May 18, 2021

		% Seeded					
	South	Central	N East	N West	Peace	Alberta	
Spring Wheat*	85.7%	88.5%	84.1%	73.3%	61.7%	81.6%	
Durum Wheat	87.4%	65.2%				84.4%	
Barley*	82.3%	66.1%	47.2%	51.5%	45.4%	64.6%	
Oats*	71.5%	61.0%	33.7%	39.2%	40.6%	43.8%	
Canola*	69.9%	50.5%	55.9%	47.8%	58.0%	56.6%	
Dry Peas*	94.2%	96.7%	99.7%	86.6%	66.4%	89.3%	
Mustard	69.9%	43.2%				62.0%	
Flax	65.1%	39.5%	29.8%			57.8%	
Potatoes	98.9%	58.5%	90.0%			90.4%	
Chickpeas	85.2%	98.0%				85.8%	
Lentils	80.7%	95.0%				82.7%	
Corn	85.0%	82.5%		82.8%		83.4%	
All Crops, May 18	81.9%	71.0%	68.1%	58.7%	58.7%	70.6%	
Major Crops(*), May 18	81.8%	71.3%	68.2%	59.0%	58.7%	69.7%	
5-year (2016-2020) Avg	74.1%	56.9%	45.7%	43.4%	45.2%	56.1%	
10-year (2011-2020) Avg	75.0%	59.4%	49.5%	52.8%	48.1%	59.2%	
Major Crops (*), May 11	55.4%	31.5%	22.8%	20.5%	17.2%	31.5%	

Figure 1: Provincial and Regional Seeding Progress as of May 18, 2021



Source: AF/AFSC Crop Reporting Survey





Our thanks to Alberta Agricultural Fieldmen and staff of AFSC for their partnership and contribution to the Alberta Crop Reporting Program. The climate map is compiled by Alberta Agriculture and Forestry, Natural Resource Management Branch.



Growing season moisture to date has differed across the province and has led to the variable soil moisture levels (see the Map). Compared to the long-term normal, soil moisture is moderately low or low in the southern and eastern parts of the province, as well as the western parts of the North West and Peace Regions. In contrast, soil moisture is moderately high in some of the wet areas, where have received over 80 mm of precipitation over the growing season. Provincially, surface soil moisture (5-year average shown in brackets) is rated as 14 (10) per cent poor, 32 (24) per cent fair, 47 (40) per cent good and 6 (22) per cent excellent, with 1 (4) per cent excessive.

Pasture and tame hay fields have had slow start in most areas, due to the cool temperatures and the lack of moisture. Warmer temperatures over the past week, coupled with rains across the middle third of the province, allowed tame hay and pasture fields to start to green up, while forage crops in the rest of the province could benefit from warmer temperatures. Pasture conditions across the province are now reported as 21 per cent poor, 27 per cent fair, 49 per cent good and 3 per cent excellent (see Table 3), with the same ratings reported for tame hay.

Table 2: Pasture Growth Conditions as of May 18, 2021

	Poor	Fair	Good	Excellent
South	7.8%	33.7%	52.4%	6.1%
Central	10.8%	21.0%	66.7%	1.5%
North East	69.7%	20.4%	10.0%	0.0%
North West	12.9%	34.5%	50.7%	1.9%
Peace	24.3%	26.4%	47.7%	1.7%
Alberta	21.0%	27.3%	48.7%	3.0%
5-year Average	13.6%	28.4%	49.3%	8.7%
10-year Average	8.8%	26.7%	53.5%	11.0%

Source: AF/AFSC Crop Reporting Survey

Regional Assessments:

Region One: Southern (Strathmore, Lethbridge, Medicine Hat, Foremost)

- Seeding is nearing 82 per cent completed, up 27 per cent from a week ago. Precipitation over the past weekend, coupled with lower temperatures could lead to frost damage in some areas and therefore some re-seeding. However, moisture is needed in the region to benefit for both seeded crops and pastures.
- Growth in pasture and tame hay fields have been slow due to the lack of heat and moisture, however it should
 improve with the recent precipitations as well as more in the forecast.
- About 35 per cent of seeded acres have now emerged, above the 5-year average of 28 per cent. Spring cereals are
 mostly reported in the seedling stage of development, while fall seeded crops are either in the tillering or in the stem
 elongation stage.
- Surface soil moisture is rated at 7 per cent poor, 43 per cent fair, 46 per cent good and 4 per cent excellent.
- Fall seeded crops are rated as 4 per cent poor, 28 per cent fair, 61 per cent good, and 7 per cent excellent.

Region Two: Central (Rimbey, Airdrie, Coronation, Oyen)

- Seeding was in full swing over the past week and progressed substantially by 40 per cent in the region. About 71 per
 cent of acres have now been seeded. A few hot days coupled with some showers helped germination of seeded
 crops and assisted forages starting to grow in most areas. However, germination has been slow in few colder areas.
- Tame hay and pasture fields were in need of moisture, but their conditions should have been improved as a result of the recent precipitation.
- More than 95 per cent of pulses are now seeded, with just over one half of canola acres. Nearly 89 per cent of spring
 wheat, 66 per cent of barley, 61 per cent of oats and 59 per cent of potatoes are reported as seeded.

- About 17 per cent of seeded acres have now emerged, above the 5-year average of 12 per cent. Spring cereals are
 mostly in the germination stage, while stage of development for fall seeded crops is variable
- Surface soil moisture is rated at 18 per cent poor, 23 per cent fair, 50 per cent good and 9 per cent excellent.
- Fall seeded crops are rated as 5 per cent poor, 15 per cent fair and 80 per cent good.

Region Three: North East (Smoky Lake, Vermilion, Camrose, Provost)

- Favourable seeding conditions advanced seeding progress by an additional 45 per cent over the past week. About 68 per cent of acres have now been seeded. Most parts of the region remained dry over the past week and in need of moisture to help immensely on crops and hay fields. The recent precipitations should improve conditions in the western, central and northern parts of the region, while the south eastern parts are still in need of moisture.
- The seeding of dry peas in now complete, while 90 per cent of potatoes, 84 per cent of spring wheat, 47 per cent of barley, 34 per cent of oats and 56 per cent of canola have now been seeded.
- About 11 per cent of seeded acres have emerged, compared to the 5-year average of eight per cent.
- Surface soil moisture is rated at 31 per cent poor, 33 per cent fair and 36 per cent good.
- For fall seeded crops, conditions are reported as 27 per cent fair and 73 per cent good.

Region Four: North West (Barrhead, Edmonton, Leduc, Drayton Valley, Athabasca)

- Warm days over the past week enabled producers to advance seeding by 39 per cent to reach 59 per cent complete.
 The precipitation over the last week increased surface and sub-surface soil moisture, refilling some low areas where water tolerance is low.
- The combination of heat and moisture throughout the past week benefited growth for tame hay and pasture fields and fields are getting green in most of areas.
- About 73 per cent of spring wheat, 52 per cent of barley, 39 per cent of oats, 48 per cent of canola and 87 per cent of dry peas are reported as seeded.
- About six per cent of seeded acres have now been emerged, slightly above the 5-year average of five per cent.
- Surface moisture is rated at 4 per cent poor, 25 per cent fair, 61 per cent good and 10 per cent excellent.
- For fall seeded crops, conditions are reported as 8 per cent poor, 62 per cent fair and 30 per cent good.

Region Five: Peace (Fairview, Falher, Grande Prairie, Peace River, Valleyview)

- Seeding for the region is now at 59 per cent complete, jumping 41 per cent from a week ago. A heavy rain on May
 18, plus snow in the forecast may slow down seeding operations, but could improve the pastures and forage crops
 growth.
- Almost 62 per cent of spring wheat, 45 per cent of barley, 41 per cent of oats, 58 per cent of canola and 66 per cent of dry peas have now been seeded.
- Cooler temperatures have delayed crop germination. Currently three per cent of crops have been emerged, below the 5-year average of seven per cent.
- Surface soil moisture is rated at 3 per cent poor, 25 per cent of fair, 56 per cent good and 12 per cent excellent, with 4 per cent excessive.

Contact

Alberta Agriculture and Forestry Intergovernmental and Trade Relations Branch Statistics and Data Development Section May 21, 2021 Ashan Shooshtarian Crop Statistician Phone: 780-422-2887

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Alberta Crop Report

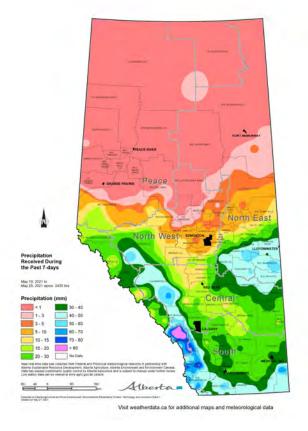


Crop Conditions as of May 25, 2021 (Abbreviated Report)

Total precipitation accumulation over the past 30-days have been at least near normal conditions for most of the province, except for the northern half of the Peace Region, which has only received 10-20 mm to date. Some parts of the South Region and a large area in the North West Region have received above normal accumulations.

Most of southern Alberta received heavy snow between May 17 to 19, 2021, and in another weather event, a large area across the North East and South Regions received subsequent rains over this past long weekend. This resulted in total precipitation of 20-50 mm for the South Region and the southeastern parts of the North East Region, where it was much needed (see the map). Most areas in the Central Region as well as a large area from the southern to the central and western parts of the North West Region received at least 10-15 mm of precipitation. Frost was reported for some regions, but the potential damage is yet to be determined.

When weather permitted over the past week, seeding progress continued. Producers across the province advanced seeding to 90 per cent complete, up 20 per cent from a week ago, and



ahead of the 5-year and 10-year averages of 78 and 82 per cent, respectively. Regionally, producers in the Peace Region made the most seeding progress at 31 per cent, followed by the North East and North West Regions at 23 and 21 per cent, respectively. Seeding progress was 18 per cent in the Central Region and 13 per cent in the South.

Table 1: Alberta Seeding Progress as of May 25, 2021

		% Seeded				
	South	Central	N East	N West	Peace	Alberta
Spring Wheat	97.0%	95.8%	98.2%	89.4%	90.1%	95.4%
Barley	93.7%	87.3%	77.2%	73.1%	85.6%	85.8%
Oats	87.4%	79.6%	68.4%	62.9%	80.6%	72.6%
Canola	89.3%	81.3%	87.1%	75.0%	89.8%	85.2%
Dry Peas	99.1%	99.9%	100.0%	92.8%	91.1%	97.3%
Major Crops, May 25	94.4%	89.3%	90.7%	80.2%	89.4%	89.8%
Major Crops, May 18	81.8%	71.3%	68.2%	59.0%	58.7%	69.7%
5-year (2016-2020) Avg	89.9%	81.7%	73.9%	68.5%	64.1%	77.5%
10-year (2011-2020) Avg	91.0%	84.6%	78.5%	76.7%	74.6%	82.2%

Source: AF/AFSC Crop Reporting Survey



Alberta

The precipitation improved soil moisture reserves for all regions by at least 15 per cent, except in the Peace Region, where soil moisture ratings fell from a week ago by 17 per cent. About 82 per cent of fields in Alberta have good or excellent surface soil moisture, compared to the five-year average of 78 per cent. Overall, provincial surface soil moisture is rated (sub-surface soil moisture ratings shown in brackets) at 1 (4) per cent poor, 16 (23) per cent fair, 57 (51) per cent good, 25 (21) per cent excellent and 1 (1) per cent excessive (see Table 2).

Table 2: Surface Soil Moisture Ratings as of May 25, 2021

	Poor	Fair	Good	Excellent	Excessive
South	1.5%	22.9%	55.7%	19.3%	0.6%
Central	1.7%	9.6%	67.5%	20.5%	0.7%
North East	0.0%	1.2%	43.8%	54.1%	0.8%
North West	0.3%	14.3%	68.8%	15.8%	0.8%
Peace	4.7%	40.4%	47.9%	6.3%	0.7%
Alberta	1.5%	16.2%	56.9%	24.7%	0.7%
5-year (2016-2020) Avg	4.9%	17.2%	46.0%	27.2%	4.7%
10-year (2011-2020) Avg	6.4%	19.4%	44.6%	26.0%	3.6%

Source: AF/AFSC Crop Reporting Survey

Rain and snow have brought much needed moisture for pasture and tame hay fields across the province, but cooler temperatures have slowed field growth. Heat and sunshine are needed for active growth in these fields. Pasture conditions across the province are now estimated at 16 per cent poor, 28 per cent fair, 53 per cent good and 3 per cent excellent, with similar ratings reported for tame hay.

Regional Assessments:

Region One: South (Strathmore, Lethbridge, Medicine Hat, Foremost)

- Snowfall over the past week coupled with rains over the long weekend brought much needed moisture to the
 region, improving the crop growth outlook going forward. Cooler temperatures on the other hand slowed
 germination and frost was reported for some areas. Some re-seeding is possible for the areas with wind or frost
 damage.
- Seeding is estimated at 94 per cent complete, up 13 per cent from a week ago, with about 52 per cent of crops emerged.
- Precipitation over the last two weeks improved hay and pasture fields conditions. Pasture conditions (tame hay shown in brackets) are rated as 5 (2) per cent poor, 33 (31) per cent fair, 56 (60) per cent good and 6 (7) per cent excellent.
- Fall seeded crops are rated as 2 per cent poor, 22 per cent fair, 67 per cent good and 9 per cent excellent.

Region Two: Central (Rimbey, Airdrie, Coronation, Oyen)

- Central Region received more moisture that was needed for crop germination, pastures and forages. Frost was reported in some counties. Warm weather is needed for active growth of crops and forages.
- Seeding advanced to an estimated 89 per cent complete, up 18 per cent from a week ago, with about 41 per cent of crops emerged.
- Pasture conditions (tame hay shown in brackets) are rated as 12 (10) per cent poor, 20 (17) per cent fair, 67 (71) per cent good and 1 (2) per cent excellent.
- Fall seeded crops are rated as 5 per cent poor, 14 per cent fair and 81 per cent good.

Region Three: North East (Smoky Lake, Vermilion, Camrose, Provost)

- The rain over the weekend was much needed in some areas and helped crops to emerge. However, crop emergence has been slow due to cold temperatures. Frost was reported for a couple of nights in most areas.
- Seeding is now estimated at 91 per cent complete, up 23 per cent from a week ago, with about 41 per cent of crops emerged.
- Forage and pasture growth is still slow, but as soon as the weather warms up, fields should grow actively. Pasture conditions (tame hay shown in brackets) are rated as 54 (52) per cent poor, 28 (24) per cent fair, 17 (23) per cent good and 1 (1) per cent excellent.
- For fall seeded crops, conditions are reported as 27 per cent fair, 47 per cent good and 26 per cent excellent.

Region Four: North West (Barrhead, Edmonton, Leduc, Drayton Valley, Athabasca)

- Accumulation of precipitation over the past couple of weeks led to flooding in some low areas, as well as areas
 with heavier soil. The below zero temperatures slowed crop emergence and growth. Frost was reported for most
 parts of the region, with any potential damage to be determined.
- Seeding is estimated at 80 per cent completed, up 21 per cent from a week ago, with about 28 per cent of crops emerged.
- Hay and pasture fields are progressing as a result of recent precipitation, but are still lagging behind normal and are in need of heat. Pasture conditions (tame hay shown in brackets) are rated as 36 (44) per cent fair, 62 (55) per cent good and 2 (1) per cent excellent.
- For fall seeded crops, conditions are reported as 32 per cent fair and 68 per cent good.

Region Five: Peace (Fairview, Falher, Grande Prairie, Peace River, Valleyview)

- Minimal rainfall over the past week allowed for significant seeding progress. Frost was reported for a couple of
 nights, but it is too early to tell if any re-seeding will be needed. Although the region is not in desperate need of
 rain, some moisture could improve crops, forages and pastures.
- Seeding is now estimated at 89 per cent complete, up 31 per cent from a week ago, with 41 per cent of crops emerged.
- Pasture conditions (tame hay shown in brackets) are rated as 17 (17) per cent poor, 30 (31) per cent fair, 51 (50) per cent good and 2 (2) per cent excellent.

Contact

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Alberta Crop Report



Crop Conditions as of June 1, 2021

Dry conditions prevailed over Alberta last week, with all of the areas south of Edmonton and the northern part of the Peace Region receiving three mm or less, (areas shaded in pink on Map). Conversely, the areas shaded orange, yellow and green received precipitation amounts ranging from five to 40 mm. The drier conditions have allowed Alberta producers to approach completion of spring planting. Provincial seeding of the 2021 crop (See Table 1) is at 99 per cent, up 10 per cent from last week. This is slightly ahead of last year and the five-year average of 93 per cent; and the ten-year average of 94 per cent. The remaining crops to be seeded are mainly feed grains (barley, oats, and mixed grain) for silage.

The growing conditions have allowed for good crop emergence in most areas of the province. Overall, 74 per cent of the crops are now above ground with 81 per cent of spring wheat, 82 per cent of durum, 70 per cent of barley, and 65 per cent of canola emerged.

Low accumulations of precipitation have had impacts on the surface soil moisture. Compared to last week the percentage rated good or excellent has dropped by seven percentage points to 75 per cent (See Table 2). The sub-soil moisture remains unchanged with 72 per cent rated good or excellent.

Table 1: Alberta Seeding Progress as of June 1, 2021

	% Seeded						
	South	Central	N East	N West	Peace	Alberta	
Spring Wheat*	99.8%	99.8%	100%	99.1%	98.9%	99.7%	
Durum Wheat	99.9%	99.2%				99.8%	
Barley*	99.4%	98.4%	92.0%	91.7%	98.1%	96.8%	
Oats*	100%	94.4%	89.2%	90.2%	97.2%	92.7%	
Canola*	99.8%	98.9%	99.4%	99.2%	98.7%	99.2%	
Dry Peas*	100%	100%	100%	100%	100%	100%	
Mustard	99.3%	100%				99.5%	
Flax	99.7%	100%	100%			99.7%	
Potatoes	99.3%	100%	100%	90.7%		98.8%	
Chickpeas	98.4%	100%				98.5%	
Lentils	100%	100%				100%	
Mixed Grain	100%	90.2%	99.0%	78.5%		88.9%	
Average	99.7%	99.1%	98.7%	97.7%	98.8%	99.0%	
Major Crops*	99.7%	99.1%	98.6%	97.8%	98.8%	98.9%	
Last Year	99.4%	99.2%	94.2%	87.8%	71.9%	93.3%	
5-year (2016-2020) Avg.	98.5%	96.1%	89.5%	91.3%	84.3%	93.2%	
10-year (2011-2020 Avg.	97.3%	96.1%	91.8%	93.6%	90.5%	94.4%	

Source: AF/AFSC Crop Reporting Survey



Alberta

Table 2: Surface Soil Moisture Rating as of June 1, 2021

	Poor	Fair	Good	Excellent	Excessive
South	2.7%	32.4%	57.2%	7.7%	
Central	4.0%	13.7%	61.3%	21.0%	
North East	0.1%	11.5%	59.4%	28.3%	0.7%
North West	2.0%	15.4%	67.4%	14.0%	1.2%
Peace	5.3%	38.7%	50.6%	5.4%	
Average	2.6%	22.4%	59.1%	15.6%	0.3%
5-year (2016-2020) Avg.	8.6%	18.5%	42.6%	25.7%	4.6%
10-year (2011-2020 Avg.	9.3%	19.2%	41.5%	26.1%	3.9%

Source: AF/AFSC Crop Reporting Survey

While there was not a lot of precipitation in the last week, hay and pasture continue to benefit from the precipitation that has fallen in the last couple of weeks. Provincially, the percentage of pasture rating good or excellent has increased by 12 percentage points to 67 per cent, and the percentage of hay rating good or excellent has increased by nine percentage points to 65 per cent. The forecasted heat in upcoming days is expected to continue to help the forages.

Regional Assessments:

Region One: South (Strathmore, Lethbridge, Medicine Hat, Foremost)

- Wind and frost events in the past couple of weeks resulted in minimal reseeding, primarily sugar beets and canola.
 Seeding is virtually done with only a few feed acres left to be planted, and 78 per cent of crops have emerged.
- Spring seeded cereal crops are entering tillering stage and fall seeded cereals are at the end of flag leaf stage.
 Canola estimates show 59 per cent in the one to three leaf stage with peas at 62 per cent in one to three node stage.
- Post emergent spraying is underway with 12 per cent of acres now dosed. Pest infestations are minimal with only
 gophers being reported over threshold. However, flea beetle and wireworm activity is increasing.
- Surface soil moisture (sub-surface moisture in brackets) ratings are three (six) per cent poor, 32 (36) per cent fair, 57 (53) per cent good and eight (five) per cent excellent.
- Pasture conditions (tame hay shown in brackets) are rated as two (two) per cent poor, 27 (29) per cent fair, 66 (63) per cent good, and five (six) per cent excellent.

Region Two: Central (Rimbey, Airdrie, Coronation, Oyen)

- Seeding is essentially done with only a few feed acres left to be planted, and 73 per cent of crops have emerged.
- Spring seeded cereal crops are averaging three leaf stage and fall seeded cereals have entered stem elongation. Canola estimates show 62 per cent in the cotyledon stage with peas at 57 per cent in one to three node stage.
- Post emergent application has started with 10 per cent of acres now sprayed. Pest infestations are minimal with only
 gophers being reported over threshold. However, flea beetle activity is on the rise.
- Surface soil moisture (sub-surface moisture in brackets) ratings are four (eight) per cent poor, 14 (14) per cent fair, 61 (61) per cent good and 21 (17) per cent excellent.
- Pasture conditions (tame hay shown in brackets) are rated as seven (five) per cent poor, 23 (20) per cent fair, 64 (63) per cent good, and six (12) per cent excellent.

Region Three: North East (Smoky Lake, Vermilion, Camrose, Provost)

- Seeding is practically done with only a few feed acres left to be planted, and 75 per cent of crops have emerged.
- Spring seeded cereal crops are averaging one leaf stage and fall seeded cereals are mid-boot stage. Canola estimates show 79 per cent in the cotyledon stage with peas at 76 per cent in one to three node stage.
- Post emergent spraying has just begun with three per cent of acres now dosed. Pest infestations are minimal with only gophers being reported over threshold, but flea beetle activity is increasing.
- Surface soil moisture (sub-surface moisture in brackets) ratings are 12 (two) per cent fair, 59 (37) per cent good and 28 (60) per cent excellent with one (one) per cent excessive.
- Pasture conditions (tame hay shown in brackets) are rated as 11 (20) per cent poor, 41 (47) per cent fair, 45 (30) per cent good, and three (three) per cent excellent.

Region Four: North West (Barrhead, Edmonton, Leduc, Drayton Valley, Athabasca)

- Seeding is nearly done with only a few feed acres left to be planted, and 63 per cent of crops have emerged.
- Spring seeded cereal crops are averaging two leaf stage and fall seeded cereals are just entering tillering stage. Canola estimates show 61 per cent in the cotyledon stage with peas at 53 per cent in one to three node stage.
- Post emergent application has started with 10 per cent of acres now sprayed. There are no pest infestations of note to report at this time.
- Surface soil moisture (sub-surface moisture in brackets) ratings are two (one) per cent poor, 15 (25) per cent fair, 68 (72) per cent good and 14 (two) per cent excellent with one (none) reported as excessive.
- Pasture conditions (tame hay shown in brackets) are rated as 18 (22) per cent fair, 78 (74) per cent good and four (four) per cent excellent.

Region Five: Peace (Fairview, Falher, Grande Prairie, Valleyview)

- Seeding is almost done with only a few feed acres left to be planted, and 73 per cent of crops have emerged.
- Spring seeded cereal crops are averaging three leaf stage. Canola estimates show 88 per cent in the cotyledon stage with peas at 62 per cent in the cotyledon stage.
- Post emergent spraying is underway with nine per cent of acres now dosed. Pest infestations are minimal with none
 reported over threshold, but flea beetles, root maggots and wireworms are being monitored.
- Surface soil moisture (sub-surface moisture in brackets) ratings are five (two) per cent poor, 39 (39) per cent fair, 51 (51) per cent good and five (eight) per cent excellent.
- Pasture conditions (tame hay shown in brackets) are rated as nine (nine) per cent poor, 24 (25) per cent fair, 58 (56) per cent good, and nine (10) per cent excellent.

Contacts

Agriculture Financial Services Corporation Business Risk Management Products Unit Lacombe, Alberta June 4, 2021 Jackie Sanden – Product Coordinator

Ken Handford – Product Development Analyst

Email: MediaInquiry@afsc.ca

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Alberta Crop Report



Crop Conditions as of June 8, 2021 (Abbreviated Report)

Spring conditions have been favourable for plant emergence with 91 per cent of all major crop acres in Alberta now up and out of the ground (See Table 1). This is an increase of 17 per cent over last week, and is also ahead of the five-year average of 82 per cent and 10-year average of 86 per cent emerged for this week in history. Spring wheat is 94 per cent emerged, six points ahead of the five-year average, while barley is 87 per cent emerged compared to the five-year average of 80 per cent and oats are 81 per cent compared to 66 on the five-year average. Canola respondents consider 87 per cent of acres emerged compared to the five-year average of 77, followed by peas at 98 per cent emerged while the five-year average is 91 per cent. Seeding progress now considered at 100 per cent complete on the major crop acres in the province, with very few acres of barley or oats left to plant for feed in Central, North East and North West regions.

Table 1: Emergence of Major Crops as of June 8, 2021

	% Emerged					
	South	Central	N East	N West	Peace	Alberta
Spring Wheat*	91.3%	89.4%	99.2%	95.8%	96.3%	94.3%
Barley*	90.5%	87.3%	84.3%	82.2%	89.9%	87.4%
Oats*	97.9%	78.7%	82.4%	74.2%	86.1%	80.9%
Canola*	83.9%	78.8%	90.1%	89.0%	94.5%	87.3%
Dry Peas*	99.7%	98.6%	100%	93.8%	95.7%	98.3%
Average	90.4%	86.0%	93.4%	90.0%	94.6%	90.7%
Last Week	77.9%	73.1%	75.0%	62.8%	72.9%	73.5%
Last Year	91.9%	86.3%	82.9%	41.2%	39.9%	74.5%
5-year (2016-2020) Avg.	92.4%	87.7%	81.5%	70.2%	67.9%	82.3%
10-year (2011-2020 Avg.	93.0%	89.7%	85.2%	79.6%	77.0%	86.3%

Source: AF/AFSC Crop Reporting Survey

Tame hay and pasture are now coming along nicely in most areas after the last couple of weeks of alternating rain and heat. Current survey results show that pasture is 6 per cent poor, 27 per cent fair, 60 per cent good with the remaining 7 per cent in excellent condition. Tame hay ratings are similar with 8 per cent poor, 29 per cent fair, 55 per cent good and 8 per cent rated as excellent (See Table 2). Both pasture and tame hay have more acres rated as fair with less acres rated excellent as compared to the five- and ten-year averages.

Table 2: Tame Hay Ratings as of June 8, 2021

	Poor	Fair	Good	Excellent
South	3.5%	31.4%	59.2%	5.9%
Central	5.7%	14.2%	63.8%	16.3%
North East	17.0%	44.7%	35.3%	3.0%
North West	0.9%	20.1%	75.4%	3.6%
Peace	15.5%	44.6%	32.9%	7.0%
Average	8.0%	29.4%	54.8%	7.8%
5-year (2016-2020) Avg.	6.7%	22.5%	55.6%	15.2%
10-year (2011-2020 Avg.	11.0%	21.5%	51.9%	15.6%

Source: AF/AFSC Crop Reporting Survey

86.3%

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Visit weatherdata.ca for additional maps and meteorological data



Our thanks to Alberta Agricultural Fieldmen and staff of AFSC for their partnership and contribution to the Alberta Crop Reporting Program. The climate map is compiled by Alberta Agriculture and Forestry, Natural Resource Management Branch.



Soil moisture conditions have moved slightly from last week as a result of the mixed rain and heat around the province. Surface soil moisture (last week in brackets) is 6 (3) per cent rated as poor, 23 (22) per cent fair, 55 (59) per cent good, 15 (16) per cent excellent with 1 (0) per cent rated as excessive. Sub-surface soil moisture (last week in brackets) is currently estimated at 7 (4) per cent poor, 25 (23) per cent fair, 47 (54) per cent good, and 21 (19) per cent excellent. The precipitation during this growing season has resulted in large areas of the Peace and South regions experiencing drier than normal conditions (see yellow and pale orange areas on map page 1). In addition, parts of the Peace, as well as pockets in the South region between Calgary and Lethbridge, are experiencing dry conditions that occur less than one in 12 to 25 years (dark orange on map page 1). There are also some smaller pockets in both Peace and South experiencing dry conditions once in 25 to 50 years (pink on map page 1).

Regional Assessments:

Region One: South (Strathmore, Lethbridge, Medicine Hat, Foremost)

- Warm temperatures and windy conditions reported throughout most of the region in the last week. Crops will soon be
 in need of rain to continue growth. Hail reported in Cypress County, Vulcan, and Foothills.
- Some wind damage on small emerging crops.
- Spring-seeded cereals are midway through the tillering stage of the Zadocs growth scale, with most crops having four or five tillers.
- Surface moisture (sub-surface moisture in brackets) rating are 5 (8) per cent poor, 36 (38) per cent fair, 55 (52) per cent good, and 4 (2) per cent excellent.
- Tame hay conditions (pasture shown in brackets) are rated 4 (3) per cent poor, 31 (30) per cent fair, 59 (62) per cent good, and 6 (5) per cent excellent.

Region Two: Central (Rimbey, Airdrie, Coronation, Oyen)

- Warm weather early in the week followed by weekend precipitation, up to 40 mm, was reported in the region. Hail was reported in the Acadia, and Special Areas 2 and 3.
- Barley and oats are nearing the end of the seedling stage of the Zadocs growth scale, with six or seven leaves unfolded, while spring wheat has just entered the tillering stage.
- Surface moisture (sub-surface moisture in brackets) rating are 6 (10) per cent poor, 14 (16) per cent fair, 50 (48) per cent good, 28 (26) per cent excellent, and 2 (0) per cent rated as excessive.
- Tame hay conditions (pasture shown in brackets) are rated 6 (8) per cent poor, 14 (18) per cent fair, 64 (64) per cent good, and 16 (10) per cent excellent.

Region Three: North East (Smoky Lake, Vermilion, Camrose, Provost)

- Warm temperatures and windy conditions reported throughout most of the region in the last week.
- Western part of region reporting some reseeded canola due to hard soil crusting caused by heavy rains right after seeding.
- Spring-seeded cereals are midway through the seedling stage of the Zadocs growth scale, with most crops having four to eight leaves unfolded.
- Surface moisture (sub-surface moisture in brackets) rating are 5 (2) per cent fair, 68 (40) per cent good, 26 (57) per cent excellent, and 1 (1) per cent rated as excessive.
- Tame hay conditions (pasture shown in brackets) are rated 17 (4) per cent poor, 45 (36) per cent fair, 35 (53) per cent good, and 3 (7) per cent excellent.

Region Four: North West (Barrhead, Edmonton, Leduc, Drayton Valley, Athabasca)

- Warm temperatures mixed with some rainfall reported throughout most of the region in the last week.
- Heavy rains and a high water table mixed with heavier soil has led to small pockets of flooded and unseedable acres southeast of Edmonton.
- Spring-seeded cereals are midway through the seedling stage of the Zadocs growth scale, with most crops having three to six leaves unfolded.
- Surface moisture (sub-surface moisture in brackets) rating are 0 (4) per cent poor, 15 (30) per cent fair, 70 (53) per cent good, 14 (13) per cent excellent, and 1 (0) per cent rated as excessive.
- Tame hay conditions (pasture shown in brackets) are rated 1 (0) per cent poor, 20 (19) per cent fair, 75 (77) per cent good, and 4 (4) per cent excellent.

Region Five: Peace (Fairview, Falher, Grande Prairie, Valleyview)

- Dry and windy conditions prevailed throughout the region last week.
- Spring-seeded cereals are midway through the seedling stage of the Zadocs growth scale, with most crops having four or five leaves unfolded.
- Surface moisture (sub-surface moisture in brackets) rating are 19 (16) per cent poor, 45 (46) per cent fair, 32 (32) per cent good, and 4 (6) per cent excellent.
- Tame hay conditions (pasture shown in brackets) are rated 15 (17) per cent poor, 45 (45) per cent fair, 33 (32) per cent good, and 7 (6) per cent excellent.

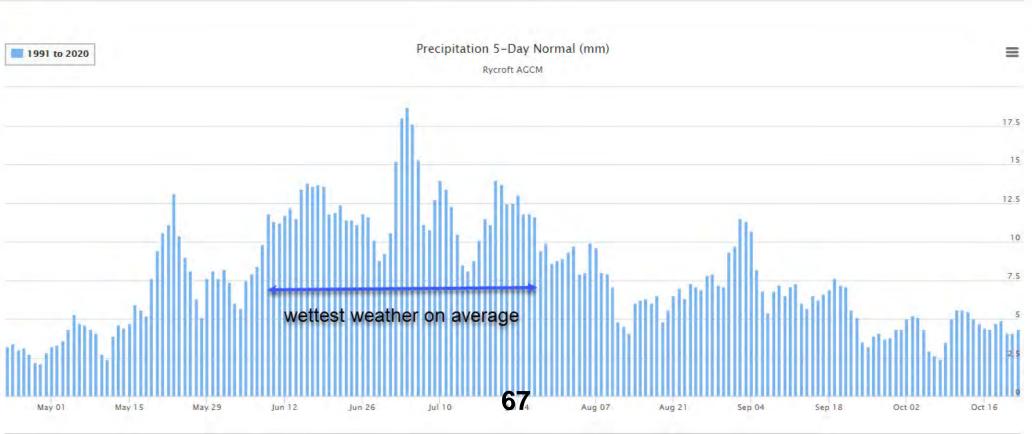
Contacts

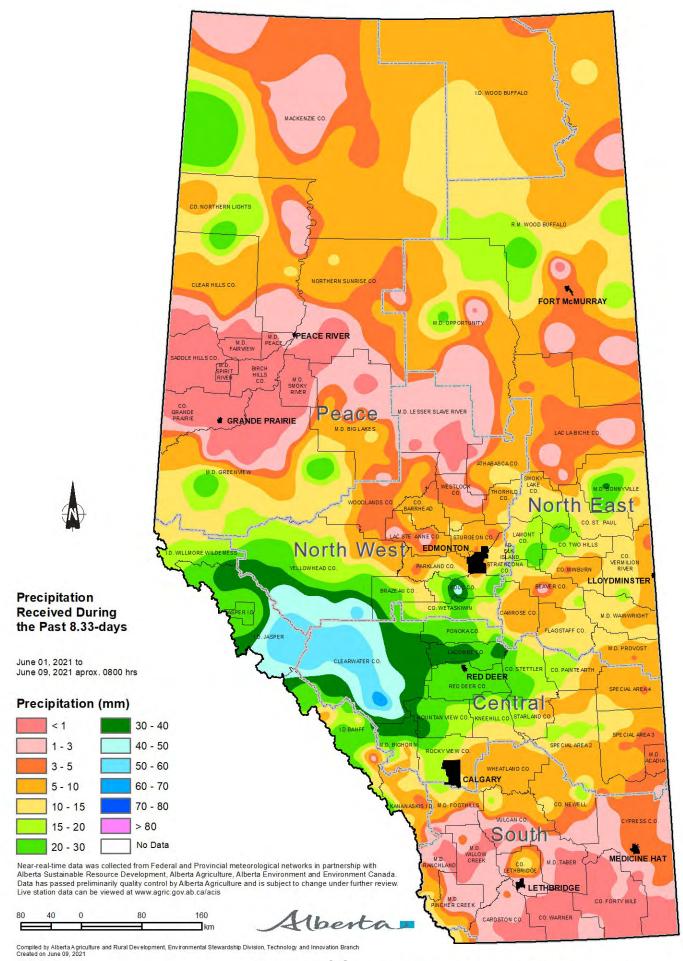
Agriculture Financial Services Corporation Business Risk Management Products Unit Lacombe, Alberta June 11, 2021 Jackie Sanden – Product Coordinator

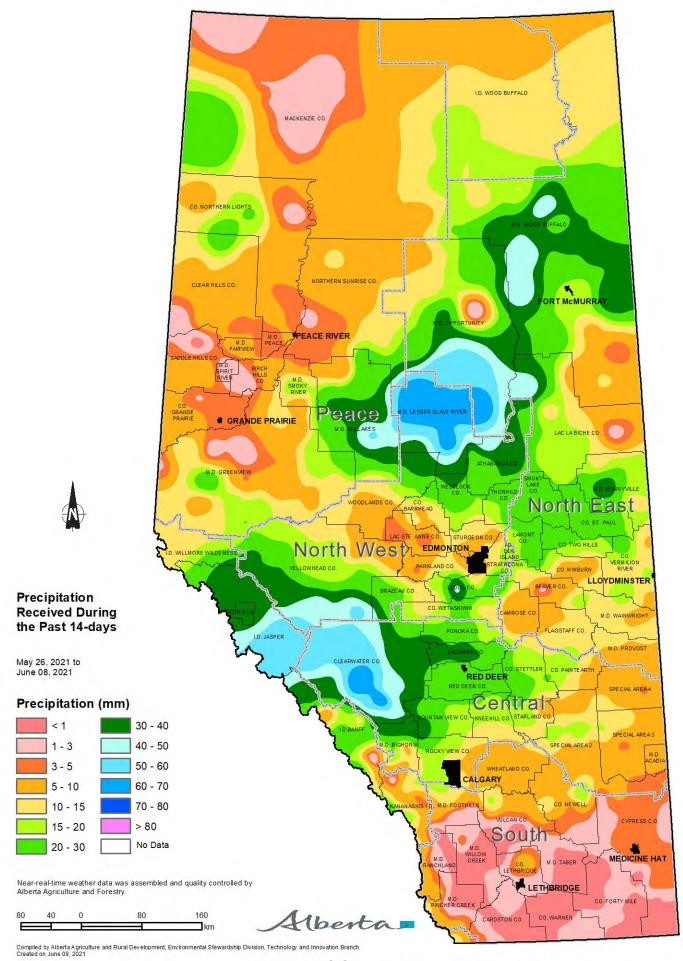
Ken Handford – Product Development Analyst

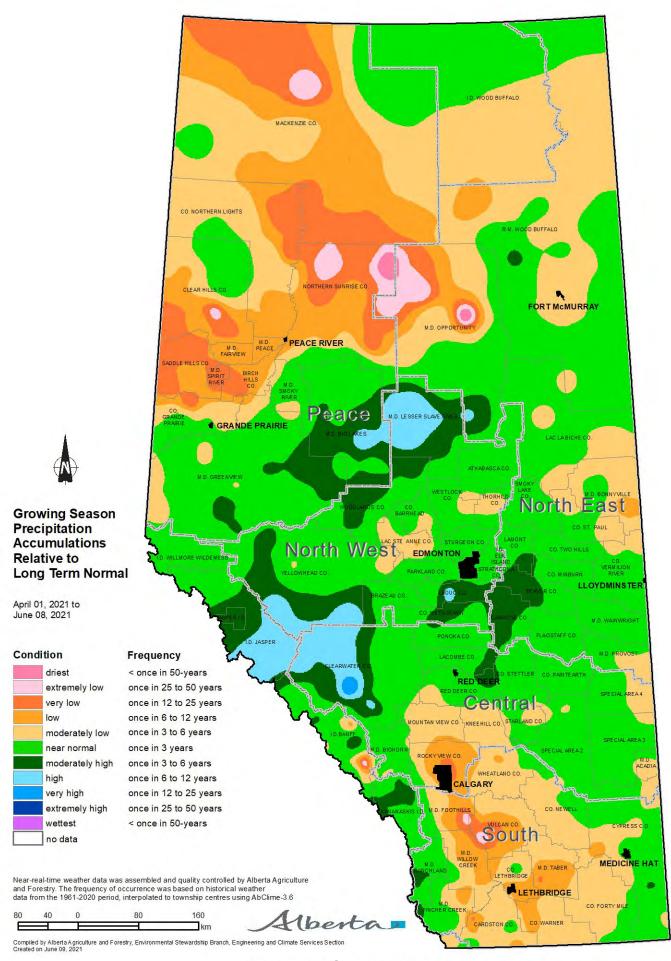
Email: MediaInquiry@afsc.ca

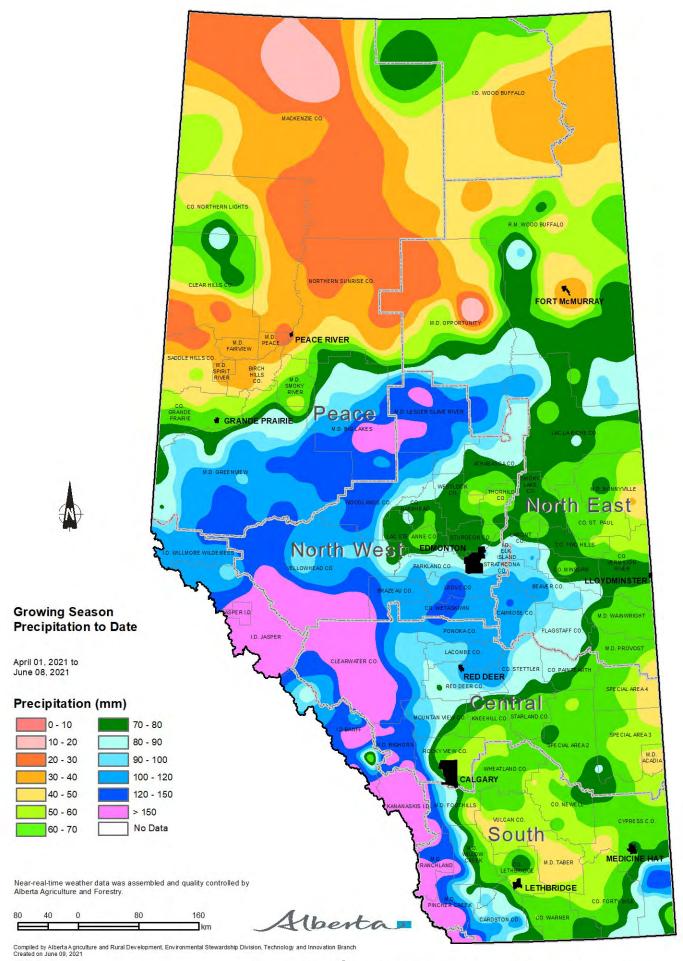
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2021 Resolution Grading

How to Use:

- 1. Use dropdown menu to insert name of mu
- 2. Use dropdown menu in column D to grade
- 3. Add comments that can assist the Committ
- 4. Submit completed spreadsheet by June 30

Definitions:

Accept the Response

A response that has been graded as Accept th

Accept in Principle

A response that is graded Accept in Principle

Incomplete

A response that is graded as **Incomplete** does Follow up is required to solicit information for t

Unsatisfactory

A response that is graded as Unsatisfactory d

Municipality Name	Resolution Number
Big Lakes	1-21
	2-21
	3-21
	4-21
	5-21
	6-21
	8-21
	9-21
	10-21

,

ncipality in Box A24 (highlighted)
each resolution
tee in assigning final grade in Column E
to Linda Hunt, Executive Assistant to the ASB Provincial Committee at: asbprovcommittee@gr

le Response addresses the resolution as presented or meets the expectations of the Provincial ASI

addresses the resolution in part or contains information that indicates that further action is being a

not provide enough information or does not completely address the resolution. he Provincial ASB Committee to make an informed decision on how to proceed.

oes not address the resolution as presented or does not meet the expectations of the Provincial AS

Resolution Name
Weed Issues on Oil and Gas Sites in Rural Alberta
Pesticide Container Collection Program
An Effective Solution for Control of RGSquirrels in Alberta
Registration of 2% Liquid Strychnine
Fusarium Testing After Cleaning
Agriculture Research Association Check Off Option
Reinstating Provincial Agriculture Department Staff
Protect Farmers Right to Farm Saved Seed
Federal Fuel Charge

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3 Committee.	
onsidered.	
SB Committee	

Grade	Comments

Municipality Grade

Acadia Accept in Principle
Athabasca Accept the Response

Barrhead Incomplete
Beaver Unsatisfactory

Big Lakes
Bighorn
Birch Hills
Bonnyville
Brazeau
Camrose
Cardston
Clear Hills
Clearwater

Crowsnest Pass

Cypress Fairview Flagstaff Foothills Forty Mile

Grande Prairie

Greenview

Kneehill

Lac Ste. Anne

Lacombe

Lac La Biche

Lamont

Leduc

Lesser Slave River

Lethbridge

Mackenzie

Minburn

Mountain View

Newell

Northern Lights

Northern Sunrise

Paintearth

Parkland

Peace

Pincher Creek

Ponoka

Provost

Ranchland

Red Deer

Rocky View

St. Paul

Saddle Hills

Smoky Lake

Smoky River

Special Area No. 2

Sepcial Area No. 3

Special Area No. 4

Spirit River

Starland

Stettler

Strathcona

Sturgeon

Taber

Thorhild

Two Hills

Vermilion River

Vulcan

Wainwright

Warner

Westlock

Wetaskiwin

Wheatland

Willow Creek

Woodlands

Yellowhead

RESOLUTION 1-21: WEED ISSUES ON OIL AND GAS SITES IN RURAL ALBERTA

WHEREAS: the Province of Alberta has experienced an extended period of economic challenge in the oil and gas industry. This has resulted in many resource companies becoming insolvent, forced into receivership, or ultimately claiming bankruptcy;

WHEREAS: there are over 1,000 oil and gas wells in the M.D. of Taber where regular lease maintenance is not being carried out as per the terms of private surface lease agreements. These include wells transferred to the Orphan Wells Association (OWA), companies in receivership or in bankruptcy proceedings, or companies currently still operating and producing product;

WHEREAS: there are no legislated timelines for oil and gas companies to reclaim inactive wells. This has resulted in 90,000 inactive wells in Alberta;

WHEREAS: the Alberta Energy Regulator (AER) has been reluctant to suspend well licenses or limit access to these sites for companies that are in non-compliance of their surface leases terms. These terms could include issues such as weed control, contamination issues, fence maintenance, non-payment of surface rentals, and/or non-payment of municipal taxes;

WHEREAS: the agricultural community in Alberta have been left to deal with the liabilities of countless oil and gas wells that have been abandoned by bankrupt companies or companies that are unwilling or financially unable to maintain their sites;

THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

that Alberta Environment and Parks, Alberta Energy and the Alberta Energy Regulator, who are responsible for energy development, to put in place appropriate legislation and standards to protect landowners from undue hardship as a result of oil and gas company's neglect of oil and gas sites maintenance issues, namely weed control

STATUS: Provincial

RESPONSE:

ALBERTA ENERGY

I have consulted with Honourable Devin Dreeshen, Minister of Agriculture and Forestry, as well as the Alberta Energy Regulator (AER) and the Orphan Well Association (OWA), and am responding to Resolution 1-21: Weed Issues on Oil and Gas Sites in Rural Alberta.

I recognize that weed control on oil and gas sites remains an important concern for ASS members, agricultural communities, and in particular for the MD of Taber. Legislated responsibility for weed control on these sites falls to different departments depending on the circumstance.

Under the Weed Control Act (Agriculture and Forestry), the landowners and/or occupant are responsible to control noxious weeds and destroy prohibited noxious weeds. Weed control on oil and gas surface leases is typically the responsibility of the oil and gas company, as

per the commitments made in a private surface lease agreement. On private lands, the AER does not have authority over weed control unless it impacts the function of the oil and gas site, in which case it would become a matter of public safety. On Crown Lands, the AER can follow up on weed control issues under the Public Lands Act.

Agriculture and Forestry understands that this can leave landowners in a difficult position and is seeking a viable solution. Agriculture and Forestry will update the ASS Provincial Committee as discussions progress. For updates, contact Minister Dreeshen's office at AF.minister@qov.ab.ca.

The AER has the authority to ensure that companies clean up and close their energy sites so that they pose no threat to the public or the environment. If a weed issue is within the AER's jurisdiction, and it is determined that the company is failing to meet their requirements under the Public Lands Act, a notice of noncompliance may be issued. ASB members may contact the AER at inquiries@aer.ca or 1-855-297-8311 for clarification about the AER's role. When a site is designated as orphan, it means the owner is no longer financially viable. Weed control for orphan sites falls under the care and custody of the OWA. Sites in the inventory of the OWA are managed in accordance with the its policies, and the OWA does not control weeds on suspended or abandoned orphaned oil and gas sites. Given the unprecedented growth of orphaned oil and gas sites in Alberta in recent years, the OWA prioritizes available funds for closure activities-instead of weed management-to ensure that energy infrastructure is removed from the landscape as soon as possible.

The OWA addresses weed infestations on orphan well sites only after the well has been moved into its reclamation inventory, where weed management is required for reclamation success. The OWA will control weeds during reclamation, prior to applying for a reclamation certificate from the AER. As well, the OWA will control weeds prior to reclamation, but only if the OWA believes that failure to do so will significantly impact reclamation efforts. The OWA, will not address weed control if the company is simply refusing to pay, is in receivership, or is in the midst of the AER process of having Working Interest Participants identified.

I understand the frustration of agricultural communities about delinquent oil and gas companies neglecting their responsibilities. That's why government is taking the boldest and strongest action to tackle oil and gas liabilities in Alberta's history. The Liability Management Framework, announced in July 2020, will contribute to a healthy oil and gas sector and ensure that industry bears the costs of site clean-up. During its multi-stage implementation, the new framework will begin to shrink the inventory of inactive and orphaned wells across the province, accelerating the timely restoration of land and protecting future generations of Albertans from experiencing a backlog of these sites.

In summer 2020 we strengthened orphan site management, including the OWA's ability to speed up site closures and the AER's ability to order the OWA to provide reasonable care and measures to prevent damage or impairment.

Under the new framework's Inventory Reduction Program, we're taking action to ensure a responsible and sustainable sector, including establishing five-year rolling annual spending targets for site clean-up and a formal opt-in mechanism, which will provide a way for landowners, land users, and communities to nominate specific inactive sites for clean up to the AER. The Licensee Special Action function in the AER provides practical, proactive guidance for struggling operators. Working with struggling operators will protect Albertans from the financial and environmental burden of more inactive or orphaned sites-while ensuring operators can meet their environmental responsibilities. Additionally, the Licensee Capability Assessment System will replace the AER's current Licensee Liability Rating program, providing an improved method of assessing the capabilities of oil and gas operators to meet their regulatory obligations at each stage of the development lifecycle.

It is important to note that farmers can apply to the Surface Rights Board for compensation for adverse effects, which could include compensation for weed control, under the five-year lease review provisions of the Surface Rights Act (Section 27). Farmers can apply for compensation under section 30 of the Act for damage to any land that is offsite, which may include compensation for weed control or weed infestation. The board decides these matters based on the relevant evidence and arguments in each case.

The Farmers' Advocate Office can help landowners file their paperwork with the Surface Rights Board, or help direct municipalities or landowners to the appropriate agency. The Farmers' Advocate Office can be reached at farmers.advocate@gov.ab.ca or by calling 310-FARM (3276). For more information on how the Surface Rights Board has decided weed control and weed infestation issues, view decisions at Canlll's online law database at www.canlii.org.

Finally, on May 1, 2020, the Government of Alberta initiated the Site Rehabilitation Program (SAP), to direct up to \$1 billion of federal oil and gas relief funding to provide grants to eligible oil field service contractors to perform well, pipeline, and oil and gas site closure and reclamation work. As part of SRP, we launched the Landowner and Indigenous Community Site Nomination program, and any landowner, Indigenous Community, or Metis Settlement resident may nominate a site for closure. For more information, see www.alberta.ca/landowner-and-indigenous-community-site-nomination.aspx.

Should the ASB wish to discuss how government is addressing oil and gas liabilities on the landscape further, contact Mr. Wade Clark, Executive Director of Resource Stewardship Policy, at 780-427-7426 or wade.clark@gov.ab.ca. Again, thank you to the ASB Provincial Committee for raising this important issue.

Sonya Savage Minister of Energy

ALBERTA AGRICULTURE

Under the Weed Control Act (Agriculture and Forestry) the landowners and/or occupant are responsible to control noxious weeds and destroy prohibited noxious weeds. Weed control on oil and gas surface leases is typically the responsibility of the oil and gas company, as per the commitments made in a private surface lease agreement. The Alberta Energy Regulator (AER) will not review a weed control matter unless weeds impact the function of an oil and gas site, in which case it would become a matter of public safety.

A municipality may issue notice to an oil and gas company to control or destroy weeds on the lease site. However, the ultimate cost of weed control is the responsibility of the landowner. When a site is designated as "orphan", it means the owner is no longer financially viable. Weed control for orphan sites falls under "care and custody" and will be- taken care of by the Orphan Well Association (OWA). The Association, however, will not address weed control if the company is simply refusing to pay, is in receivership, or is in the midst of internal AER process of having Working Interest Participants identified.

Agriculture and Forestry (AF) understands that this can leave landowners in a difficult position and has instigated conversations with the AER to seek a viable solution to this issue. AF will update the Provincial ASB committee as discussions progress.

Devin Dreeshen
Minister of Agriculture and Forestry

ASBPC INITIAL GRADE: Accept in Principle

COMMENTS: All of the concerns from the resolution were addressed in the response. The Committee will follow up with the Ministry/Department of Agriculture and Forestry for updates. May 25, the Committee brought the resolution and the responses to the attention of ADM John Conrad who committed to checking in on the status and getting back to the Committee. The Committee will be sure to bring this up when they meet with Minister Dreeshen later this year.

RESOLUTION 2-21: PESTICIDE CONTAINER COLLECTION PROGRAM

WHEREAS: Since 1989, Alberta's municipalities have been involved with the collection of empty

pesticide containers and have done so with only one time funding from Alberta

Environment & Parks to establish permanent collection sites within their municipalities,

which many of these sites are in need of repair;

WHEREAS: Municipal governments in cooperation with transfer station and landfill operators

manage the day to day maintenance and supervision of the sites and cover the costs associated with the transfer of containers from temporary depots to permanent sites

without any funding from Alberta Environment and Parks;

WHEREAS: The highest rinse rate compliance on pesticide containers are in the provinces that are

currently running the program through the Agricultural Retail Industry as a result of their zero tolerance policy and container rejection if they do not meet the requirements

due to their constant supervision;

WHEREAS: Collection programs are poised to become increasingly expensive and labor intensive

with the addition of bale & silage wrap, Ag-film, twine and grain bag collection

programs;

WHEREAS: Alberta and Manitoba are the only provinces in Canada that utilize municipalities to

deliver the pesticide collection program within their province while the remaining provinces place this responsibility and cost on agricultural retail facilities who market and

sell pesticide products;

THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

That Alberta Environment and Parks develop, with CleanFARMS, an empty pesticide container program that places the responsibility of collecting pesticide containers in Alberta with the Agricultural Retail/Dealer and removes the responsibility from the municipalities.

STATUS: Provincial

RESPONSE:

ALBERTA ENVIRONMENT AND PARKS

Municipalities and agricultural retailers have been an integral component and important supporter of pesticide container collection since collection began in 1980. In 1989, the program was transferred to Croplife Canada, and then CleanFARMS, a stewardship offshoot of Croplife Canada formed in 2010. Since that time, there has been no provincial funding or Alberta government role in administering a pesticide container program.

Municipalities and agricultural retailers have been an integral component and important supporter of pesticide container collection since collection began in 1980. In 1989, the program was transferred to Croplife Canada, and then CleanFARMS, a stewardship offshoot of Croplife

Canada formed in 2010. Since that time, there has been no provincial funding or Alberta government role in administering a pesticide container program.

- the Pesticide Sales Handling Use and Application Regulation requires that no person shall dispose of a non-refillable plastic or metal container that held a pesticide listed in Schedule 1 or 2 except at a container collection site, and
- the Waste Control Regulation (all regulations are available at www.qp.alberta.ca)
 requires the following to be properly disposed of, unless otherwise authorized by the director:
 - contaminated paper, glass, cardboard material or a bag that contained pesticides listed in Schedule 1 or 2,
 - empty containers with pesticides listed in Schedule 3 or 4, and
 - empty containers with grains/seeds treated with pesticides.

Through Alberta's Natural Gas Vision and Strategy designed to transition toward a circular economy for plastics, Alberta aims to establish the western North American centre of excellence for plastics diversion and recycling by 2030. For more information, please visit www.alberta.ca and search for "natural gas vision and strategy."

Environment and Parks is engaging with stakeholders to develop and implement a new extended producer responsibility (EPR) policy framework. The aim is to shift responsibility for waste management and recycling from municipalities and taxpayers to product producers and consumers. Under this framework, the department is also considering new recycling programs for packaging and printed paper, and household hazardous wastes. This could also allow for recycling of additional plastic items and waste into the future.

For more information, please contact Mr. Nasir Shaikh, Pesticide Policy Specialist, in Edmonton, at 780-718-3490 (dial 310-0000 for a toll-free connection), or at nasir.shaikh@gov.ab.ca.

Jason Nixon Minister of Environment and Parks

ASBPC INITIAL GRADE: Unsatisfactory

COMMENTS: The ASBPC feels that this response, does not address the issue brough forward by the resolution and has asked for further clarification from AEP as to the legal responsibilities of the municipalities should they choose to close their pesticide container collection site; who would become responsible for improperly disposed of pesticide containers, and how would the legislation be enforced. Additional response from AEP was not yet received on May 31. On May 25 the ASBPC brought this resolution to the attention of ADM for Primary Agriculture John Conrad and he agreed to speak to AEP on behalf of the ASBs as well.

Once the second response from AEP is received it will be posted on the ASB website.

RESOLUTION 3-21: AN EFFECTIVE SOLUTION FOR CONTROL OF RICHARDSON GROUND SQUIRRELS IN ALBERTA

WHEREAS: Strychnine will no longer be available for Richardson Ground Squirrel Control as of

March 4, 2023;

WHEREAS: There is no efficacious, cost effective and environmentally friendly alternative to

strychnine;

WHEREAS: Richardson Ground Squirrels can multiple quickly and can be very destructive to both

annual and perennial crops and cause livestock injuries;

WHEREAS: It appears little research has recently been carried out on alternate, effective control

measures;

THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

the Pest Management Regulatory Agency have Strychnine registration extended until an effective and safe alternative control be found and Alberta Agriculture and Forestry make significant funding available for research into a sustainable, long term solution for control of Richardson ground squirrels.

STATUS: Provincial

RESPONSE:

PMRA

As per the Pest Control Products Act, before a new pesticide is allowed to be used or sold in Canada, it must undergo a rigorous scientific assessment process to determine that the health and environmental risks of using the product are acceptable, when used according to label directions. The same is true when pesticides that are on the market are re-evaluated to assess whether they continue to meet the Department's health and environmental standards, and whether they should continue to be permitted for use in Canada. Health Canada must take regulatory action at any time should unacceptable risks to human health or the environment be identified.

As per the regular process for the re-evaluation of pesticides, the public was consulted on the proposed decision for strychnine (Proposed Re-Evaluation Decision, PRVD2018-13: Strychnine and Its Associated End-use Products (Ground Squirrel Use)). Multiple lines of evidence (risk assessment based on available information, incident reports, information from provinces including information generated through the Integrated Pest Management Committee) indicated that risks of concern for non-target poisonings continue to occur with the use of strychnine.

In the final re-evaluation decision (RVD2020-06), Health Canada reviewed and took into consideration all comments, data and information received from the Canadian public and stakeholders, including Agricultural Service Boards. However, the environmental risks associated with the use of strychnine for the control of Richardson's ground squirrels (RGS) remained due to

the lack of practical mitigation measures to protect non-target organisms, including species at risk. As a result, Health Canada concluded that cancellation of the use of strychnine for the control of RGS was necessary.

Health Canada recognizes that products to control RGS populations are needed and acknowledges the value of strychnine to agricultural users. The following registered alternatives to strychnine were provided previously, although it is understood that these alternatives have their limitations as well:

- o chlorophacinone and diphacinone (multi-feed anticoagulant baits);
- o zinc phosphide (non-anticoagulant bait);
- o aluminum phosphide (fumigant); and
- o white mustard seed powder and sodium alpha-olefin sulfonate (foam)

Health Canada encourages grower groups to contact the registrants of potential alternative products, Agriculture and Agri-Food Canada (AAFC), and their provincial representatives to discuss the possibility of pursuing further research into RGS control.

Please note that the Province of Alberta and several regional municipalities have submitted Notices of Objection (NoO) to request a "Reconsideration of Decision" following the re-evaluation decision. The NoOs are currently being assessed, and the outcome will be posted to Health Canada's PMRA website in the Public Registry.

Peter Brander ED PMRA

ALBERTA AGRICULTURE AND FORESTRY

Alberta continues to advocate for strychnine be reinstated for Richardson's Ground Squirrel control. In fall 2020, Alberta submitted a Notice of Objection to Pest Management Regulatory Agency (PMRA) for the de-certification of Strychnine. In March 2021, the PMRA informed AF that the re-evaluation decision was still under internal review following delays in completing the assessment.

Departmental Responses Agriculture and Forestry

ASBPC INITIAL GRADE: Accept the Response

COMMENTS: The Committee graded this response as Accept the Response as it addresses the resolution as presented.

RESOLUTION 4-21: REGISTRATION OF 2% LIQUID STRYCHNINE

WHEREAS: Under the authority of the Pest Control Product Act and based on the evaluation of

currently available scientific information, Health Canada has stated that products containing strychnine for control of Richardson's Ground Squirrels do not meet the current standards for environmental protection and, therefore, have been cancelled;

WHEREAS: Studies conducted by the PMRA and the province of Alberta indicated that risks

associated with label-approved use to non-target species was low;

WHEREAS: Richardson's Ground Squirrels are considered agricultural pests due to the substantial

damage they cause to crops, livestock, and equipment which can result in economic

losses for farmers;

WHEREAS: Training in the safe use of pesticides can be provided to agricultural producers in Alberta

by participating in the Farmer Pesticide Certificate program;

WHEREAS: To help maintain a level of Richardson ground squirrel infestation below economic

threshold;

THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

That the Provincial Minister of Agriculture and Forestry lobby with all other Provincial Ministries of Agriculture to encourage Health Canada and the Pest Management Regulatory Agency to reinstate 2% Liquid Strychnine on the market available on a temporary basis to agricultural producers to utilize on their farms for control of Richardson's Ground Squirrels.

FURTHER THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

That Alberta Agriculture and Forestry create and maintain a system that provides producers participating in the Farmer Pesticide Certificate program the opportunity to purchase and use Strychnine safely.

STATUS: Provincial

RESPONSE:

ALBERTA AGRICULTURE AND FORESTRY

AF and Environment and Parks, in partnership with the Farmer Pesticide Certification Committee, have developed a Farmer Pesticide Training Course and Certificate Examination. The training material is now housed on the Environment and Parks website. This is free of charge and is available for farmers needing to purchase or use pesticides on their own land (or land they rent or lease), and where the label requires all users to be certified.

In fall 2020, Alberta submitted a Notice of Objection to PMRA for the de-certification of Strychnine. In March 2021, the PMRA informed AF that the re-evaluation decision was still under internal review following delays in completing the assessment. Until a final decision is made by

PMRA on the use of strychnine for the control of Richardson's Ground Squirrel, the Farmer Pesticide Certificate Program is not looking to incorporate Strychnine training into the program.

Departmental Responses Agriculture and Forestry

<u>PMRA</u>

See response for 3-21

ASBPC INITIAL GRADE: Accept the Response

COMMENTS: The Committee graded the responses to 3-21 as Accept the Response as it addresses the resolution as presented.

RESOLUTION 5-21: FUSARIUM TESTING AFTER CLEANING

WHEREAS: Fusarium Head Blight (FHB) is a fungal disease of cereal crops that affect kernel

development, affecting yield and quality;

WHEREAS: FHB was added as a declared pest to Alberta's Agricultural Pest Act in 1999;

WHEREAS: The Fusarium graminearum Management Plan was released in 2002, hoping to limit the

spread of the disease and lessen the economic impact;

WHEREAS: Currently some seed cleaning plants still require testing for FHB prior to cleaning in

order to avoid transferring to other seed lots;

WHEREAS: The initial sample might not be representative of the seed lot due to improper sampling

procedures;

WHEREAS: Seed can be sold as "Certified Fusarium Free", but still have a high concentration of the

disease present due to improper sampling resulting in false negative test results;

THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

that Agriculture and Agri-Food Canada revise the labeling requirements to include "Fusarium graminearum Free" seed, in that the sample is taken at the seed plant after it is cleaned by the seed plant operator in order to ensure the quality of the certified seed, and test results, same as the germination test, will have to be provided to the buyer

STATUS: Provincial

RESPONSE:

AGRICULTURE AND AGRI-FOOD CANADA

As you may know, Canadian farmers and seed producers rely on efficient and flexible Seeds Regulations that help prevent fraud and ensure the traceability, quality, and safety of Canada's seed supply, which is the basis for all agricultural production. The Canadian Food Inspection Agency has launched seed regulatory modernization, a multi-year, structured and comprehensive review of the seed regulatory framework. The goal of the modernization is to improve consistency, reduce complexity, and provide flexibility for seed systems to keep pace with advancements in industry as well as bolster consumer protection.

Seed regulatory modernization is an excellent forum to introduce seed testing and labelling issues for discussion, such as the one identified in resolution 5-21. There will be many opportunities for agricultural associations to provide input.

You can provide direct input on seed regulatory modernization to the Canadian Food Inspection Agency by emailing cfia.seedregmod-modregsem.acia@canada.ca.

Honourable Marie-Claude Bibeau Agriculture and Agri-Food Canada

ASBPC INITIAL GRADE: Incomplete

COMMENTS: The ASBPC graded this response as Incomplete because the response was not received on time and so was at the time of Committee review, Incomplete. Since this response was received the Committee has distributed the response to all the ASBs so they can provide their feedback thought the email address provided by the Minister.

RESOLUTION 6-21: AGRICULTURAL RESEARCH ASSOCIATION CHECK OFF OPTION

WHEREAS: Producers must pay mandatory checkoff's on various agricultural products;

WHEREAS: Producers have no voluntary option to chose where they send these checkoff dollars;

WHEREAS: This process seems to violate freedom of choice and would be an excellent candidate for

red tape reduction;

WHEREAS: Agricultural Research Associations have conducted variety trials and provided proof of

concept for farming practices for decades, efforts that are often unsung, and face a funding crunch under the changes to Agricultural Research funding in the Province of

Alberta;

THEREFORE, BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

That Alberta Agriculture and Forestry and the Alberta Agricultural Products Marketing Council create the option for producers to allocate check-off dollars directly to their local Applied Research Association or various approved Agricultural Research and Development Organizations.

STATUS: Provincial

RESPONSE:

ALBERTA AGRICULTURAL PRODUCTS MARKETING COUNCIL

Each of Alberta's 20 agricultural marketing boards and commissions (MBCs) is created and governed by a set of regulations under the Marketing of Agricultural Products Act (MAPA). These regulations set out specific purposes and powers for each MBC, and clearly establish the requirement that service charges collected under each regulation are to be used to finance the respective MBC's activities. The formation of any MBC under MAPA requires producers of a specific commodity to take collective action to establish the organization for the express purpose of representing producers of that commodity. This includes demonstration of producer support to establish a service charge to fund the organization.

Shifting to a model that directs service charges to Applied Research Associations (ARAs) or Agriculture Research and Development Organizations (ARDOs) would require amendments to MAPA that may change the intent of the legislation and expand Marketing Council's mandate beyond commodity-specific MBCs. MBCs may choose to direct service charges toward research projects through ARAs or ARDOs – producers may present this option for consideration by the MBC Board, who would likely seek support from the majority of producers.

In addition, twelve of Alberta's 20 MBCs operate with a refundable service charge model. Producers in these sectors can request a refund of their service charge contributions and could potentially provide this funding to ARAs or ARDOs if they feel this is a more appropriate use of their funds.

Recently, Results Driven Agriculture Research (RDAR) approved funding the ARAs \$2 million per year for 2 years (2021-22 and 2022-23). Funding is to be delivered to a single organization to administer. RDAR is open to providing this funding, including a potential increase, but will require a written plan demonstrating increased efficiency, results measurement, and a province-wide approach to activities. In addition, RDAR will further assist the ARAs by providing an additional grant in the range of \$50,000 to \$75,000 to hire a consultant to help the ARAs work through the planning process and writing of the detailed plan.

I encourage the ASB Provincial Committee to work with RDAR and the MBCs in defining specific opportunities for partnerships, which may also include funding or contracting research and extension projects.

Brent McEwan General Manager Alberta Agricultural Products Marketing Council

AGRICULTURE AND FORESTRY

Each of Alberta's 20 agricultural marketing boards and commissions (MBCs) is created and governed by a set of regulations under the Marketing of Agricultural Products Act. These regulations set out specific purposes and powers for each MBC, and clearly establish the requirement that service charges collected under each regulation are to be used to finance the respective MBC's activities. The formation of any MBC under the Marketing of Agricultural Products Act requires producers of a specific commodity to take collective action to establish the organization for the express purpose of representing producers of that commodity. This includes demonstration of producer support to establish a service charge to fund the organization.

MBCs may choose to direct service charges toward research projects through Applied Research Associations (ARAs) or Agriculture Research and Development Organizations (ARDOs). Producers may present this option for consideration by the MBC Board, who would likely seek support from the majority of producers.

Twelve of Alberta's 20 MBCs operate with a refundable service charge model. Producers in these sectors can request a refund of their service charge contributions and could potentially provide this funding to ARAs or Agriculture Research and Development Organizations if they feel this is a more appropriate use of their funds.

Recently, Results Driven Agriculture Research (ROAR) approved funding to the ARAs of \$2 million per year for 2 years (2021-22 and 2022-23). Funding is to be delivered to a single organization to administer. ROAR is open to providing this funding, including a potential increase, but will require a written plan demonstrating increased efficiency, results measurement, and a province-wide approach to activities. In addition, ROAR will assist the ARAs reach these goals by providing an additional grant in the range of \$50,000 to \$75,000 to hire a consultant to help the ARAs work through the planning process and writing of the detailed plan.

AF encourages the ASB Provincial Committee to work with ROAR and the MBCs in defining specific opportunities for partnerships, which may also include funding or contracting research and extension projects.

Departmental Response Agriculture and Forestry

ASBPC INITIAL GRADE: Accept the Response

COMMENTS: The Committee graded this resolution response as Accept the Response because it addressed the resolution as presented.

On May 25 the ASBPC brought this resolution to the attention of the ADM and had a discussion about the importance of the Applied Research Associations (ARAs) to ASBs and producers. They discussed the importance of extension and base funding for the ARAs, and mentioned their concerns about ARAs accessing their funding through the Results Driven Agriculture Research association (RDAR) as RDAR is focused on research and not extension. It was acknowledged that extension is front of mind with the department and that they were also watching RDAR to see how things progress.

RESOLUTION 7-21: DELEGATION OF ASB'S AND AAAF TO AGRICULTURAL ASSOCIATIONS AND COMMODITY GROUPS

WHEREAS: Commodity Groups and Agricultural Associations have been more vocal regarding

provincial agricultural issues;

WHEREAS: Commodity Groups and Agricultural Associations have been increasingly discussing

municipal/provincial policies and legislation;

WHEREAS: Commodity Groups and Agricultural Associations have a lack of legislative and

municipal/provincial government experts on their board;

WHEREAS: Commodity Groups and Agricultural Associations have made legislative and policy

recommendations that negatively impacted the agricultural industry;

THEREFORE, BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

That the Commodity Groups and Agricultural Associations listed below be contacted and requested to have an Agricultural Service Board (ASB) representative chosen by the ASB Provincial Committee and a technical advisor chosen by the AAAF to be present as a delegation during policy and legislative discussions at their Board/Director meetings and/or Annual General Meetings & Special Meetings.

STATUS: Provincial

GRADE: DEFEATED

RESOLUTION 8-21: REINSTATING PROVINCIAL AGRICULTURAL DEPARTMENT STAFF

WHEREAS: The Ministry of Agriculture and Forestry is responsible for supporting environmentally

sustainable resource management practices;

WHEREAS: Staffing levels in the Agriculture and Forestry department have been reduced

significantly;

WHEREAS: Municipal staff have been required to provided assistance to agricultural producers and

acreage owners;

WHEREAS: Agriculture and Forestry staff members having years of experience represent

institutional experience that cannot be replaced;

THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

That the Ministry of Alberta Agriculture and Forestry reinstates funding for extension staff that will assist agricultural, apicultural, and horticultural producers throughout Alberta.

STATUS: Provincial

RESPONSE:

AGRICULTURE AND FORESTRY

AF understands the ASB Provincial Committee's concerns with the workforce adjustments that occurred in 2020 and early 2021, and the reduction in dedicated extension staff within the department. The Ag-Information Centre has transitioned from being the first point of contact for agriculture information and resources to being the first point of contact for department programs and resources for the agriculture community. AF is working with industry partners to ensure clients are connected with the right information and resources.

ASBPC INITIAL GRADE: Accept the Response

COMMENTS: The Committee graded this resolution response as Accept the Response as it addressed the resolution as presented.

RESOLUTON 9-21: PROTECT FARMERS RIGHTS TO USE FARM SAVED SEED

WHEREAS: Agriculture and Agri-Food Canada (AAFC) and the Canadian Food Inspection Agency

(CFIA) conducted consultations on implementing a system to collect royalties on farm

saved seed in 2018/19;

WHEREAS: Paying royalties on farm saved seed will increase the price of seed and decrease profit

margins for farmers;

WHEREAS: Royalties on farm saved seed could limit seed choices for farmers as seed companies

move to deregister old varieties, which could mean farmers would be forced to pay

royalties and to grow only newer varieties;

WHEREAS: AAFC and CFIA have not outlined details on how much a royalty would be, how it would

be collected or how royalties would be dispersed;

WHEREAS: The Canadian Plant Technology Agency launched a pilot project in spring 2020 to test

value use agreements whereby farmers would be required to pay royalties on farm

saved seed;

WHEREAS: A royalty system has potential to decrease farmers' ability to make sound agronomic

decisions and operate profitably;

WHEREAS: Other options to fund crop variety research are available, including increased

investment of grain commission check-off funds in variety research;

WHEREAS: Options other than royalty systems to increase investment in crop variety development

are required in order to maintain Canada's competitive advantage in the global market;

THEREFORE, BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

Agriculture and Agri-Food Canada abandon the proposal to implement the adoption of End Point Royalties or farm saved seed "trailing royalty contracts" and pursue investment options for globally competitive crop variety development that have direct and tangible on farm benefits.

STATUS: Provincial

RESPONSE:

CANADIAN FOOD INSPECTION AGENCY

As you are aware, Agriculture and Agri-Food Canada and the Canadian Food Inspection Agency were asked by the Grains Value Chain Roundtable, a consultative body with representation from across the value chain, to launch public consultations on two proposed seed royalty models to stimulate greater investment and innovation in Canada's cereal sector. The first phase of the consultative process consisted of a series of face-to-face meetings across Canada in late 2018 and early 2019. These five sessions are viewed by government as an initial step in a multi-stage discussion process.

The Government of Canada understands that many farmers place considerable value on their ability to save seed and often choose specific crop kinds and varieties that allow for replanting of saved seed in subsequent years. At the same time, a large number of agriculture sector stakeholders have signaled a desire for Canada to consider some form of value-creation model that would allow increased investment in wheat variety development by both public and private breeding programs across the country. Many producers see increased investment in research as being key to ensuring the long-term profitability and competitiveness of Canada's cereals sector.

The government remains open to hearing all perspectives on this matter, and will consider the feedback heard to inform next steps in the process. Again, thank you for writing on what is a critical issue for the cereals sector, farmers, and Canadian agriculture.

Siddika Mithani President Canadian Food Inspection Agency

ASBPC INITIAL GRADE: Incomplete

COMMENTS: The Committee grading this response as Incomplete because it did not specify how ASBs and farmers could present their perspectives, offer feedback and participate in next steps in the process. The Committee wrote to Siddika Mithani to ask for further information on the process and how to participate.

Additional Response received May 27, 2021

CFIA

Thank you for your follow-up letter in regards to the Canadian Food Inspection Agency's response to the Alberta Service Board Provincial Committee's seed royalty resolution (Resolution 9-21: Protect Farmers Rights to Use Farm Saved Seed), passed at your 2021 meeting. I appreciate the opportunity to hear your views, and to clarify the status of stakeholder engagement efforts around seed royalty models.

As indicated in my previous correspondence, the six in-person sessions held across Canada in late 2018 and early 2019 were part of a consultative process that was undertaken at the request of the Grains Value Chain Roundtable. From what we heard at these sessions, and from the letters sent by stakeholder groups such as yours, there was a lack of consensus on a clear path forward. As a result, a decision was made to postpone further consultations for the time being.

The Government of Canada will continue exploring ways to improve Canada's existing system for cereal variety development. In doing so, we remain open to all perspectives and options to enhance the profitability of the sector.

Siddika Mithani
President, Canadian Food Inspection Agency

RESOLUTION 10-21: FEDERAL FUEL CHARGE

WHEREAS: the Federal Fuel Charge (Carbon Tax) mandated under the Greenhouse Gas Pollution

Pricing Act came into effect in Alberta on January 1, 2020;

WHEREAS: the Federal Fuel Charge amount varies by fuel product offering and the Federal

Government has announced targeting relief for certain sectors and individuals including

farmers;

WHEREAS: the Climate Leadership Implementation Act effective January 1, 2017 states "that every

recipient shall pay a carbon levy on purchases of natural gas and propane";

WHEREAS: as purchasers, farmers cannot pass the additional costs on to consumers or

international markets as the international markets set the price for agricultural products and that a producer trying to increase their price to compensate would not be able to

sell their product and recover the additional costs;

WHEREAS: certain categories of customers are exempt from paying the Federal Fuel Charge,

including:

• Farmers for gasoline, light fuel oil (diesel);

- Fishers for gasoline, light fuel oil (diesel);
- Registered Distributors;
- Registered Air Carriers;
- Registered Rail Carriers;
- Registered Road Carriers;
- Remote Power Plant Operators that generate Electricity for remote Communities for light fuel oil; and
- A partial exemption at eighty per cent (80 %) for propane supplied to Greenhouse operators;

WHEREAS: propane and natural gas used by many farming operations in their agricultural

production is not included in the list of eligible exemptions;

WHEREAS: under the Greenhouse Gas Pollution Pricing Act eligible farming machinery means

property that is primarily used for the purpose of farming and that is a "farm truck or tractor", a vehicle not licensed to be operated on a public road, an industrial machine,

or a stationary or portable engine, or prescribed activity;

THEREFORE BE IT RESOLVED

THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST

that Alberta Agriculture and Forestry, Alberta Environment and Parks, and Alberta Energy jointly lobby the Government of Canada alongside Alberta's Agricultural Service Boards and the Rural Municipalities of Alberta (RMA) to provide a carbon levy exemption for all consumption of propane and natural gas for all recognized agricultural production, including, but not limited to grain farming, greenhouse, and other similar practices.

STATUS: Provincial

RESPONSE:

AGRICULTURE AND FORESTRY

AF strongly supports the expansion of the carbon tax exemption for agriculture to include natural gas and propane. Minister Dreeshen wrote a letter in January 2020 to federal Minister Bibeau, outlining the undue burden that the federal carbon tax places on agricultural producers, with a particular focus on the use of natural gas and propane used in grain drying.

On a positive note, recently, a Private Members Bill (C-206) was introduced by MR Lawrence (Northumberland-Peterborough South) calling for the expansion of the exemption to include all agricultural use of natural gas and propane. The Bill recently passed second reading with cross-party support from the Conservative, Bloc Quebecois, and NDP.

In the interim, AF offers a cost-sharing program for producers to upgrade the efficiency of their grain dryers. The Efficient Grain Dryer Program will pay for half the cost of grain dryer components, on new or existing dryers, that improve the energy efficiency of the operation. These efficiency improvements will lower fuel costs for grain drying and provide relief from any future fuel cost volatility.

Department Response Agriculture and Forestry

ENVIRONMENT AND PARKS

On May 1, 2019, the Government of Alberta repealed the Climate Leadership Implementation Act, ending the collection of the provincial carbon levy in Alberta. No such taxes are currently collected by the government, and no exemptions are awarded or managed.

The Government of Canada's Greenhouse Gas Pollution Pricing Act (GGPPA) is not a provincial policy. Applicable starting in January 2020, consumers - including farmers - are obliged to pay a fuel charge (carbon tax), barring some specific farming exemptions. The Government of Alberta does not agree the federal government has the right to impose the GGPPA on the provinces. That is why the Alberta government has taken the federal government to court and is awaiting the decision from the Supreme Court of Canada on whether the federal government has the right to implement the GGPPA.

The Alberta government acknowledges the scope of exemptions offered under the GGPPA is too narrow to capture the breadth of farming activities, and we will raise these concerns in our discussions with the federal government. Furthermore, we encourage the Agricultural Service Board to contact federal representatives through engagement on the newly released federal climate plan, "A Healthy Environment and a Healthy Economy" (found at www.canada.ca).

I also encourage you to contact Judy Meltzer, Director General Corporate Secretariat, Environment and Climate Change Canada, at judy.meltzer@canada.ca. You could also contact Matt Parry, Director General for Agriculture and Agri-Food Canada, at matt.parry@canada.ca.

Jason Nixon Minister Environment and Parks

ASBPC INITIAL GRADE: Accept the Response

COMMENTS: The Committee graded this response as Accept the Response as it addressed the resolution as presented.

Summary ASBPC 2021 Resolution Grading

RESOLUTION	GRADE	COMMENTS
1-21: Weed issues on Oil and Gas Sites in Rural Alberta	Accept in Principle	All the concerns from the resolution were addressed in the response. The Committee will follow up with the Ministry/Department of Agriculture and Forestry for updates. May 25, the Committee brought the resolution and the responses to the attention of ADM John Conrad who committed to checking in on the status and getting back to the Committee. The Committee will be sure to bring this up when they meet with Minister Dreeshen later this year.
2-21: Pesticide Container Collection Program	Unsatisfactory,	The ASBPC feels that this response, does not address the issue brough forward by the resolution and has asked for further clarification from AEP as to the legal responsibilities of the municipalities should they choose to close their pesticide container collection site; who would become responsible for improperly disposed of pesticide containers, and how would the legislation be enforced. Additional response from AEP was not yet received on May 31. On May 25 the ASBPC brought this resolution to the attention of ADM for Primary Agriculture John Conrad and he agreed to speak to AEP on behalf of the ASBs as well. Once the second response from AEP is received it will be posted on the ASB website.
3-21: An Effective Solution for Control of RG Squirrels in Alberta	Accept the Response	The Committee graded this response as Accept the Response as it addresses the resolution as presented.
4-2: 1 Registration of 2% liquid Strychnine	Accept the Response	The Committee graded the responses to 3-21 as Accept the Response as it addresses the resolution as presented.
5-21: Fusarium Testing After Cleaning	Incomplete	The ASBPC graded this response as Incomplete because the response was not received on time and so was at the time of Committee review, Incomplete. Since this response was received the Committee has distributed the response to all the ASBs so they can provide their feedback thought the email address provided by the Minister.

6-21: Agriculture Research Association Check Off Option	Accept the Response	The Committee graded this resolution response as Accept the Response because it addressed the resolution as presented.
8-21: Reinstating Provincial Agriculture Department Staff	Accept the Response	The Committee graded this resolution response as Accept the Response as it addressed the resolution as presented.
9-21: Protect Farmers Right to Farm Saved Seed	Incomplete	The Committee grading this response as Incomplete because it did not specify how ASBs and farmers could present their perspectives, offer feedback and participate in next steps in the process. The Committee wrote to Siddika Mithani to ask for further information on the process and how to participate. Additional Response received May 27, 2021
10-21: Federal Fuel Charge	Accept the Response	The Committee graded this response as Accept the Response as it addressed the resolution as presented.



Brazeau County

7401 – Twp Rd 494, P.O. Box 77, Drayton Valley, Alberta T7A-1R1
PHONE: (780) 542-7777 - FAX: (780) 542-7770
www.brazeau.ab.ca

June 16, 2021

The Honourable Jonathan Wilkinson Minister of Environment and Climate Change House of Commons Ottawa, ON K1A 0A6

Dear Minister Wilkinson;

RE: Synthetic Fertilizer Emissions

Brazeau County's Agricultural Service Board (ASB) would like to express their concern regarding the Federal Government's emissions target for synthetic fertilizer.

While we recognize the importance of the reduction of synthetic fertilizer emissions, we support Fertilizer Canada's concern on how the reduction is measured and achieved.

There is currently a focus on increasing Canadian agricultural exports and increasing production of crops used for bio fuels. In order to achieve this production increase, a proportionate increase in fertilizer is also required. A reduction of synthetic fertilizer emissions essentially places a cap on overall synthetic fertilizer use. In essence, this will limit the production of crops.

Fertilizer Canada is suggesting that rather than a straight 30% reduction of total emissions allowable from fertilizer, a reduction in emission intensity or a measurement based on bushels produced may be more appropriate.

We strongly encourage you to continue to review how best to achieve the fertilizer emissions target without placing limits on overall crop production. Please do not hesitate to contact me if you have any questions or concerns.

Dallas Ekstrom

Yours sincere

Brazeau County Agricultural Service Board Chairperson

cc: The Honourable Marie-Claude Bibeau, Minister of Agriculture and Agri-Food Member of Parliament Gerald Soroka MLA Mark Smith, Drayton Valley-Devon Alberta Agricultural Service Boards