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MOISTURE DEFICIENCY ENDORSEMENT INSURING AGREEMENT

AFSC will indemnify the Insured when the Percent of Normal Moisture is less than the Threshold Moisture at the Selected Weather Station(s) for the Insured's dryland Hay pursuant to this Insuring Agreement. This Insuring Agreement incorporates by reference, and is subject to, the Terms and Conditions and Benefits. The definitions in the Terms and Conditions will apply unless the same term is otherwise defined in this Insuring Agreement.

The Moisture Deficiency Endorsement can be purchased along with dryland Hay Insurance. This endorsement provides additional coverage based on the current year's precipitation over a specified period at the Selected weather Station(s) compared to the long-term normal. Conditions at the weather stations may not reflect conditions on the insured fields.

ARTICLE 1. DEFINITIONS

"August Moisture" s the amount of precipitation, as determined by AFSC, for the month of August, for Selected Weather Station(s).

"Designated Peril" means lack of moisture at the Selected Weather Station(s). For greater clarity, this is the only Designated Peril under this Insuring Agreement, and the Designated Perils listed under Article 1 of the Terms and Conditions do not apply to this Insuring Agreement.

"Dollar Coverage" means the dollar amount of this additional Coverage and is based on 15 percent of 80 percent of the Risk Area Normal Yield for the type of Hay being insured and the highest Spring Insurance Price.

"Hay" means seeded perennial tame grass, Legumes or grass-Legume mix crops grown for mechanical harvesting for use as livestock feed.

"Insurable Crop" means Hay grown on non-irrigated land.

"July Moisture" is the amount of precipitation, as determined by AFSC, for the month of July, for a Selected Weather Station(s).

"June Moisture" is the amount of precipitation, as determined by AFSC, for the month of June, for a Selected Weather Station(s).

"May Moisture" is the amount of precipitation, as determined by AFSC, for the month of May, for a Selected Weather Station(s).

"Normal Moisture" means the long-term average precipitation, as determined by AFSC, for a Selected Weather Station(s).

"Normal Precipitation" for each Period of Moisture is the long-term average amount of moisture, as determined by AFSC, for a Selected Weather Station(s).



"Payment Rate" means the rate of compensation at which the Insured is indemnified, as determined by AFSC.

"Percent of Normal Moisture" means, for the Selected Weather Station(s) for the current year, the sum of the May Moisture, June Moisture, July Moisture and August Moisture expressed as a percent of their respective Normal Moisture, with each Period of Moisture weighted by the Weighting Option elected by the Insured.

"Period of Moisture" is the period for which moisture is measured for this insurance program. There are four different periods: May, June, July and August.

"Selected Weather Station" means eligible weather station(s) elected, to a maximum of three, by the Insured and approved by AFSC.

"Threshold Moisture" is the Percent of Normal Moisture for a Selected Weather Station(s) below which insurance payments begin.

"Weighting Option" is the option elected by the Insured to apply specified percentages to the Percent of Normal Moisture for each Period of Moisture.

ARTICLE 2. SPECIFICATIONS

2.01 Coverage

- a. Each Risk Area has an Area Normal Yield for each pasture type based on recommended cattle-carrying capacity. The Dollar Coverage offered through this Insuring Agreement will be determined by AFSC for each Risk Area and eligible Hay type.
- b. Eighty percent of the Area Normal Yield is used as the base yield, setting Coverage for each Insured in the Risk Area.

2.02 Coverage Restrictions

AFSC will use precipitation data provided by the Alberta Government ministry responsible for Agriculture. If AFSC is not able to complete the assessment due to insufficient data being provided, this Contract will cease to be enforceable against AFSC and cease to have any effect against AFSC. AFSC will then return to the Insured all paid Premiums.

2.03 Pricing

a. **Spring Insurance Price**: AFSC offers one price for each Insurable Crop type insured under Hay Insurance for this Endorsement.

2.04 Premium

a. Adjustments & Discounts:

2%	Early Payment Discount	Applied to Premium payments received by AFSC the later of
		June 25 or within 15 days of each versions billing date

2.05 Elections and Renewal

- a. New clients must select this Endorsement along with Hay Insurance on or before the last day of February.
- b. **Renewal Process:** An Insured who purchased Moisture Deficiency Endorsement in the previous year will be automatically renewed based upon the previous year's information.
- c. **Length of Season:** The Insured chooses between a short season option, which includes May, June and July precipitation, or a long season option of May, June, July and August precipitation, that best represents pasture growth and supports their management strategies.

Length of Season	May	June	July	August
Short season				
Long season				

d. **Weighting Option**: the Insured has the choice of different Weighting Options within the growing season. Based on the weighting percentages, there are four season options available to select.

Season	Weighting (%)				
options	May	June	July	August	
A Short	40	40	20		
B Short	40	30	30		
C Long	30	30	20	20	
D Long	25	25	25	25	

Weighting the precipitation in each month allows you to select the Weighting Option that best reflects your area, crop type and management practices.

2.06 Weather Stations and Precipitation Measurements

- a. A network of weather stations is established across the province. Rainfall for the current year is compared to historical rainfall (normal) for the same growing period at the Selected Weather Station(s) to determine a claim.
- b. The Insured can choose up to three weather stations from the network of eligible weather stations that best represent the conditions on their farm and within proximity of their land base. The Insured is not allowed to skip a weather station, and Selected Weather Station(s) are subject to approval by AFSC.
- c. Precipitation used to calculate a claim payment for the current year is limited by the following rules:
 - i. Daily recorded precipitation at a Selected Weather Station(s) is capped at an amount equal to the Normal Precipitation for the month;
 - ii. Monthly recorded precipitation at a Selected Weather Station(s) is capped at an amount equal to one and a half times the Normal Precipitation for that month; and,
 - iii. Daily precipitation measurements under 1.0 mm will be considered 0.0 mm, and will not be included in determining the precipitation for the month.
 - iv. This Insuring Agreement includes an extreme temperature trigger that will deduct from the monthly recorded precipitation of the Selected Weather Station(s):
 - 1) 1.0 mm for each day the temperature is 30 Celsius or higher
 - 2) an additional 2.0 mm (3.0 mm total) for each day the temperature is 35 Celsius or higher
- d. Precipitation is recorded at the Selected Weather Station(s). Precipitation in millimeters (mm) at the weather station for the current year is compared to the Normal Precipitation in mm recorded for the same weather station(s). Both the actual and normal amounts are weighted by the option selected at the same weather station(s). This comparison describes a 'percentage of normal', which, if less than the allowable Threshold Moisture percent of normal, initiates a claim payment.

ARTICLE 3. CONDITIONS

3.01 Crop Types

- a. A person who has a direct or indirect conflict of interest with precipitation data provided at one or more Selected Weather Stations(s) used for Moisture Deficiency Endorsement shall not purchase insurance based upon the data from the weather station for which person may have a conflict. A person may be in a conflict of interest if the person is involved in providing, either directly or indirectly weather data for a weather station.
- b. Moisture Deficiency Endorsement is not available for irrigated alfalfa.
- c. The Variable Price Benefit is not available under this Insuring Agreement.

ARTICLE 4. REPORTING DEADLINES

If a reporting deadline date falls on a weekend, the deadline will be extended to the next Business Day.

Last Date to complete the task	Task	Additional information
Last day of February	Apply for, make changes to, cancel Moisture Deficiency Endorsement	Before the start of the Crop Year, the Insured must declare: Length of Season Weighting Option Selected Weather Station (a)
		Selected Weather Station(s)

ARTICLE 5. INSURED ACRES

5.01 Conditions

- a. Moisture Deficiency Endorsement is only available under Hay Insurance.
- b. Once selected, all acres of dryland Hay including alfalfa, Legume and grass that are insured under the Hay Insurance are insured under this Insuring Agreement.

ARTICLE 6. CLAIMS

6.01 Claim Deadlines and Notice of Loss

The Insured is not required to submit a Notice of Loss to initiate a claim. Payments under this Insuring Agreement are based on a comparison between annual measured precipitation at the Selected Weather Station(s) relative to the long-term average precipitation for the same station(s), described as a Percent of Normal. If the Percent of Normal is less than the allowable Threshold Moisture, an indemnity is automatically paid.

6.02 Statement of Loss

- a. Upon calculation of a claim for loss, AFSC will serve the Insured with a Statement of Loss.
- b. If the calculation of a claim for loss results in no payment, the Statement of Loss will be considered to be the final Statement of Loss for the claim by the Insured. No further Statement of Loss will be issued by AFSC.

ARTICLE 7. INDEMNITIES

7.01 Indemnity Assessment

Losses are paid when accumulated precipitation at the Selected Weather Station(s) falls below the Normal Precipitation for the Selected Weather Station(s) according to the payment schedule.

- a. An Indemnity for each Insurable Crop shall be calculated as follows:
 - i. [Dollar Coverage x Payment Rate]

The maximum Indemnity payable shall be 100 percent of the Dollar Coverage.

- b. The Payment Rate will be based on the average of the Payment Rates for the Insured's Selected Weather Station(s).
- c. The Payment Rate for the Selected Weather Station(s) will be zero when the Percent of Normal Moisture is equal to or more than the Threshold Moisture. For each 2% decrease that the Percent of Normal Moisture is below the Threshold Moisture, the Payment Rate will increase by 5% of the insured Dollar Coverage.
- d. Except at the discretion of AFSC, no changes will be made to the May Moisture, June Moisture, July Moisture or August Moisture values after an Indemnity has been paid.

MDE Payment Schedule						
Moisture % of Normal	Payment Rate %	Moisture % of Normal	Payment Rate %			
>= 80	0	60	50			
79	5	59	55			
78	5	58	55			
77	10	57	60			
76	10	56	60			
75	15	55	65			
74	15	54	65			
73	20	53	70			
72	20	52	70			
71	25	51	75			
70	25	50	75			
69	30	49	80			
68	30	48	80			
67	35	47	85			
66	35	46	85			
65	40	45	30			
64	40	44	30			
63	45	43	95			
62	45	42	95			
61 50 <=41 100						
Note: >= means greater than or equal to; <= means less than or equal to						

7.02 Calculation of Indemnity

Example: Indemnity calculation

- 200 acres of Hay insured at \$20 per acre = \$4,000 Coverage
- Option D (25% monthly weighting)
- Number of days with highs of 30 Celsius or higher
 - May 0 days; June 2 days, July 5 days; August 2 days
- Number of days with highs of 35 Celsius or higher
 - May 0 days; June 0 days, July 2 days; August 1 day

Example Information for Weather Stations						
Period of Moisture	May	June	July	August	Total ***	
Measured Moisture (mm)*,**	17	102	45	36		
Less adjustment for Extreme Heat:						
Day highs at 30 Celsius or higher	-0	-2	-5	-2		
Day highs at 35 Celsius or higher	-0	-0	-4	-2		
Measured moisture (with capping)	17	100	36	32		
less extreme heat						
Normal Moisture (mm)	55	73	86	72		
Percentage of Normal Moisture prior	30.9	137.0	41.9	44.4		
to weighting						
Weighting Option (%) Period of	25	25	25	25		
Moisture						
Percentage of Normal Moisture ***	7.7	34.3	10.5	11.1	63.6	

^{*}Daily moisture is capped at an amount equal to the Normal Moisture for the month.

Measurements that are less than 1.0 mm will be considered 0.0 mm, and will not be included in determining the precipitation for the month.

Monthly calculation of weighted percent of normal (for the month of May)

- Measured moisture divided by Normal Moisture times Weighting Option for each Period of Moisture equals Weighted percent of Normal
- 17 mm / 55 mm x 25% = 7.7%

The weighted percent of normal for each month is added together for the cumulative weighted percent of normal for the long season, then rounded down, is 63 percent or normal.

The MDE Payment Schedule displays the Payment Rate for each Percent of Normal Moisture. The Payment Rate for 63 percent of normal is 45 percent.

Season claim payment calculation

- Total Coverage times payment rate
- \$4,000 x 45%
- \$1,800

Disclaimer: Daily precipitation received from Alberta Agriculture, Forestry and Rural Economic Development (AFRED) will be rounded to the nearest 0.1 mm.

^{**}Monthly moisture is capped at 150 percent of the Normal Moisture for the month.

^{***}Rounded down for payment calculation