

Pasture, Rangeland, and Forage— Rainfall Index

2015 Spring Bandera County
March 26, 2015

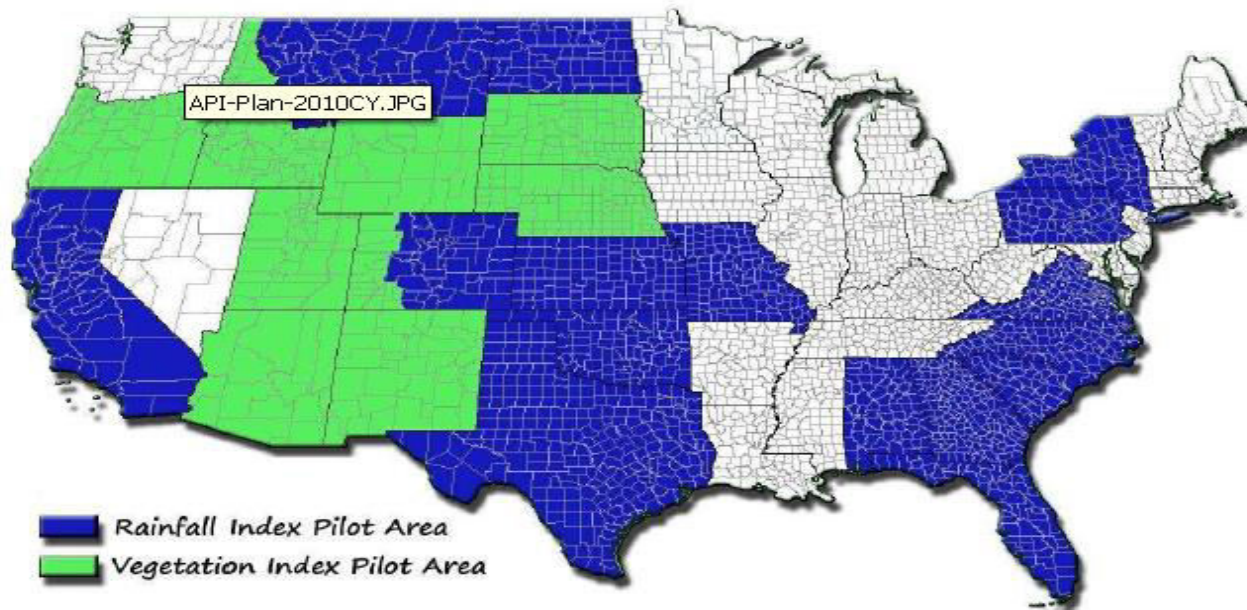
Rob Hogan – Extension Economist



Introduction - Rainfall

◆ Beginning with the 2011 Crop Year

Pasture, Rangeland Forage - 2011 Crop Year County Availability
by Insurance Plan





**All Counties in Texas are now
included in the Rainfall Index**

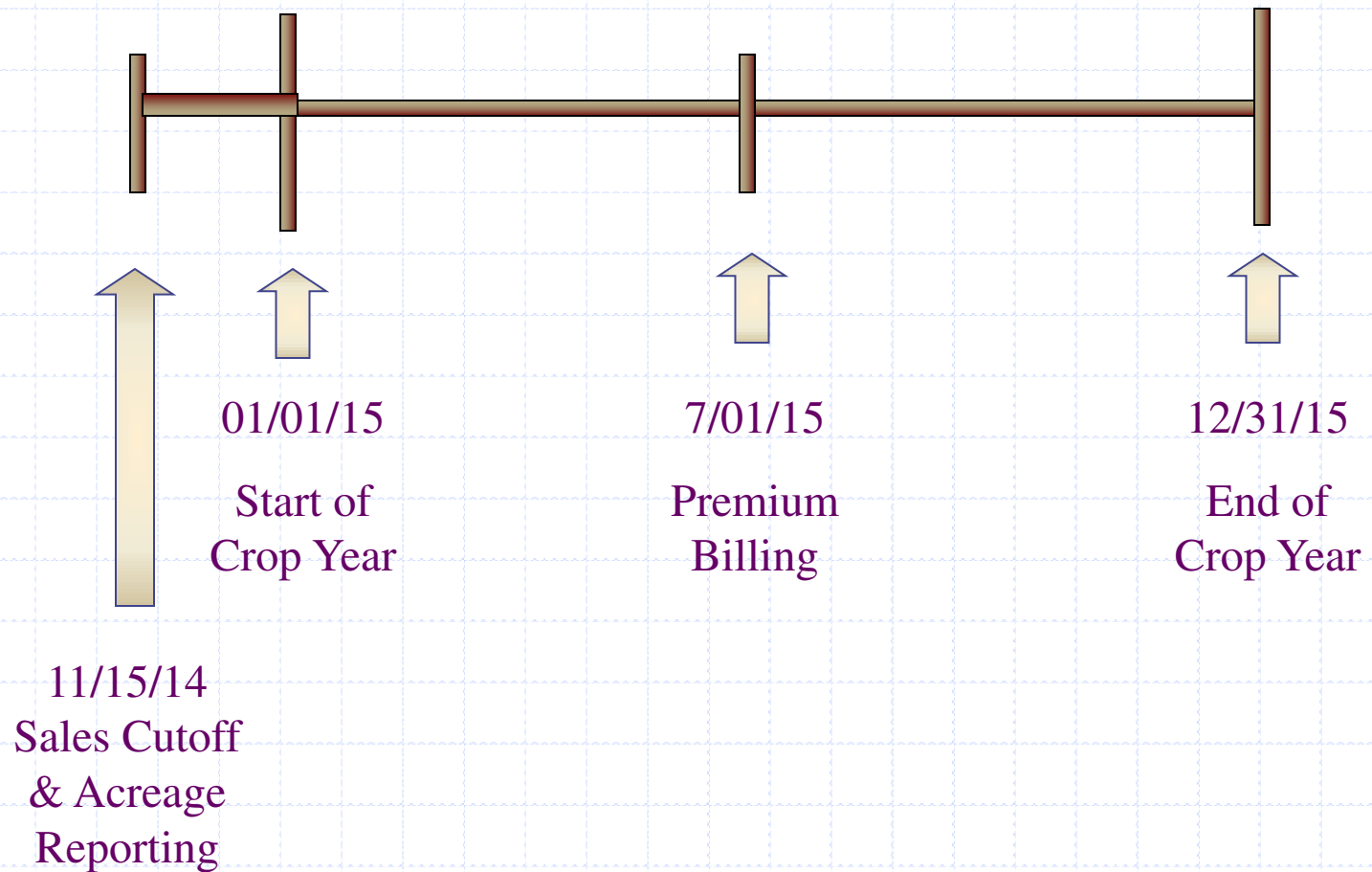
Lots of Resources Available

- ◆ Your Insurance Agent

- ◆ www.rma.usda.gov

- Publications
- Decision Aids

Program Dates For 2015



PRF-RI Program Overview

- ◆ Area of insurance = 0.25° grids
 - ◆ Grids vs. County
 - ◆ Grids are approximately 12 x 12 miles in size
 - ◆ Provides for a consistent program across the United States
 - ◆ Counties vary in size, but the grids do not
 - ◆ Grid size reduces basis risk vs. county size
 - Allows for closer correlation to individual experience
 - ◆ Grids will cross county and state lines
 - ◆ Actual rainfall to be used in calculations is recorded in each grid

Bandera County Grazing Land Example

County Base Value

- ◆ Determined value by RMA-USDA
- ◆ Same value for the entire county
 - Far East Texas: \$38.76
 - Far West Texas: \$6.60
- ◆ Anticipated that these values will be updated (or evaluated) on a periodic base of 3 to 5 years.

Bandera County Grazing Land Example

Protection Factor

- ◆ Allows you to adjust your County Base Value by a factor of between 60% to 150%
- ◆ You adjust this to fit your operation
 - i.e., my Bandera County ground is about average.

Bandera County Grazing Land Example

Coverage Level

- ◆ Allows you to adjust your deductible by a factor of between 10% to 30%
- ◆ $\text{Deductible\%} = 100\% - \text{Coverage level\%}$
- ◆ Choose from 70% to 90% in 5 % increments
- ◆ Subsidized by the gov't

70%	75%	80%	85%	90%
59%	59%	55%	55%	51%

Bandera County Grazing Land Example

- ◆ 640 acres in **Grid # 11523**
- ◆ **County Value** (from RMA) = \$8.25/a
- ◆ I think my pasture is about the same as yours
=> **Protection Factor** I choose = 100%
 - I believe my pasture is about average of land in the county.
- ◆ **Coverage Level** = 90%
 - This is a 10% deductible
- ◆ (\$8.25 X 100% X 90%)
- ◆ My ***Protection Level*** per acre = \$7.43/ac

Bandera County Grazing Land Example

When do you need the rain most?

- ◆ 2 month **intervals**
- ◆ Choose at least two
- ◆ Of the 640 acres, I put:
 - 17% in Interval I (Jan/Feb)
 - 16% in Interval II (Mar/Apr)
 - 17% in Interval III (May/June)
 - 16% in Interval IV (July/Aug)
 - 17% in Interval V (Sept/Oct)
 - 17% in Interval VI (Nov/Dec)

Bandera County Grazing Land Example

Would I have gotten a payment in 2014?

◆ If the rainfall falls below your coverage level (90% in example) during any of the 2 month intervals selected, you receive a payment equal to the difference between the amount of rainfall received in **that** interval (in percentage of long-term rainfall) and your coverage level.

Protection Information



Intended Use:

Coverage Level (%):

Productivity Factor (%):

Insurable Interest (%):

Insured Acres:

Sample Year:

Table Graph

Index Interval	Percent of Value (%)	Policy Protection per Unit	Premium Rate per \$100	Total Premium	Premium Subsidy	Producer Premium	Actual Index Value	Indemnity
Jan-Feb	17	\$808	27.38	\$221	\$113	\$108	8.5	\$732
Feb-Mar	N/A	\$0	24.89	\$0	\$0	\$0	20.1	\$0
Mar-Apr	16	\$760	25.20	\$192	\$98	\$94	30.5	\$502
Apr-May	N/A	\$0	21.67	\$0	\$0	\$0	122.8	\$0
May-Jun	17	\$808	19.67	\$159	\$81	\$78	119.5	\$0
Jun-Jul	N/A	\$0	25.34	\$0	\$0	\$0	60.4	\$0
Jul-Aug	16	\$760	30.25	\$230	\$117	\$113	106.8	\$0
Aug-Sep	N/A	\$0	22.32	\$0	\$0	\$0	98.1	\$0
Sep-Oct	17	\$808	19.92	\$161	\$82	\$79	47.8	\$379
Oct-Nov	N/A	\$0	24.05	\$0	\$0	\$0	69.1	\$0
Nov-Dec	17	\$808	32.10	\$259	\$132	\$127	93.1	\$0
Per Acre	N/A	N/A	N/A	\$1.91	\$0.97	\$0.94	N/A	\$2.52
Policy Total	640	\$4,752	N/A	\$1,222	\$623	\$599	N/A	\$1,613

Graph



Type: Index Values Estimated Indemnities

Range: Start End

Intervals:

Jan-Feb Feb-Mar Mar-Apr

Apr-May May-Jun Jun-Jul

Jul-Aug Aug-Sep Sep-Oct

Oct-Nov Nov-Dec

County Base Value	\$8.25
Dollar Amount of Protection	\$7.43
Total Insured Acres	640
Total Policy Protection	\$4,752
Subsidy Level	51.0%
Maximum Percent of Value per Index Interval	50.0%

Index Interval	Percent of Value (%)	Policy Protection per Unit	Premium Rate per \$100	Total Premium	Premium Subsidy	Producer Premium	Actual Index Value	Indemnity
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So, Let's Look At 2011

Please Select a Location:

State:

County:

Grid:



Protection Information

Intended Use:

Coverage Level (%):

Productivity Factor (%):

Insurable Interest (%):

Insured Acres:

Sample Year:

Graph

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Feb-Mar	N/A	\$0	24.89	\$0	\$0	\$0	9.2	\$0
Mar-Apr	16	\$760	25.20	\$192	\$98	\$94	1.0	\$752
Apr-May	N/A	\$0	21.67	\$0	\$0	\$0	18.8	\$0
May-Jun	17	\$808	19.67	\$159	\$81	\$78	35.0	\$494
Jun-Jul	N/A	\$0	25.34	\$0	\$0	\$0	30.1	\$0
Jul-Aug	16	\$760	30.25	\$230	\$117	\$113	42.5	\$401
Aug-Sep	N/A	\$0	22.32	\$0	\$0	\$0	49.8	\$0
Sep-Oct	17	\$808	19.92	\$161	\$82	\$79	46.9	\$387
Oct-Nov	N/A	\$0	24.05	\$0	\$0	\$0	80.4	\$0
Nov-Dec	17	\$808	32.10	\$259	\$132	\$127	148.6	\$0
Per Acre	N/A	N/A	N/A	\$1.91	\$0.97	\$0.94	N/A	\$3.80
Policy Total	640	\$4,752	N/A	\$1,222	\$623	\$599	N/A	\$2,435

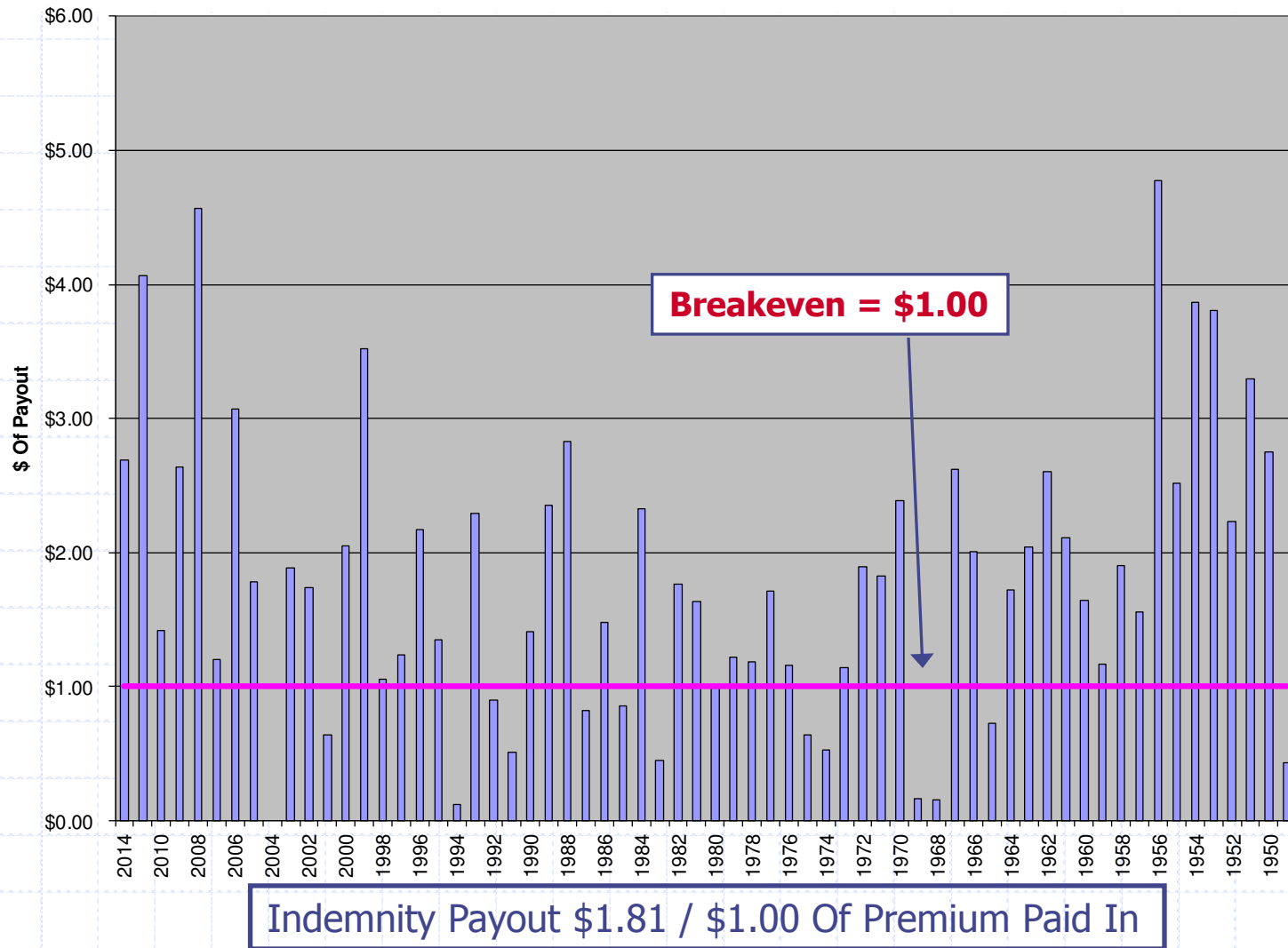
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Calculate

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Per Acre	N/A	N/A	N/A	\$1.91	\$0.97	\$0.94	N/A	\$3.80
Policy Total	640	\$4,752	N/A	\$1,222	\$623	\$599	N/A	\$2,435

Long Term Payout

50 out of 64 years (78% of the time) it paid to buy this insurance.



Why?

- ◆ Subsidized by the Government
 - 51% to 59% of the premium is paid by the government.
- ◆ Very few production risk management tools have existed in the past for livestock producers.
- ◆ Longer term, to eliminate ad hoc disaster programs.
- ◆ The PRF-RI program is a single peril, group risk plan that does not require the producer to develop an Actual Production History (APH) or file for a loss.
- ◆ Small administration fee \cong \$30.00



Thank You — Comments? Questions?

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