



Rainfall Index Pasture, Rangeland and Forage

Rainfall Index (RI) Pasture, Rangeland,
and Forage (PRF) Tools

August 2015



This information is provided for training only. Any discrepancy between the training material and the policy is not intended. The information provided in this training does not supersede policy and procedure. Any changes to the policy and procedures may make this training material obsolete. *If you use this training material check to assure it is still relevant.*

How to get to the Web Based Tools

What's New | Newsroom | Programs | Blog | Site Map | A-Z Index | Advanced Search | Help | Search

Thursday 8/14/2014

Popular Topics

- Appendix III/M-13
- Bulletins and Handbooks
- Crop Policies and Pilots
- Federal Crop Insurance Corp
- Field Offices: ROs | COs
- Frequently Asked Questions
- Information Browser
- Laws and Regulations
- Livestock Policies
- Reinsurance Agreements

THE FARM BILL

RMA has taken steps to implement provisions in the 2014 Farm Bill

USDA Continues Farm Bill Implementation

RMA Interim Final Rule

RMA Farm Bill Page

What's New | Newsroom | **USDA Blog**

RMA clarifies prevented planting standards in the Prairie Pothole Region
Visit your crop insurance agent for more information.

Federal Crop Insurance Program Broadens Options for Organic Producers
Visit the RMA organics spotlight for more information. Fact Sheet. Secretary Vilsack's Vision.

Annual Forage Rainfall Index (RFI)

Quick Links

- Agent/company locator
- Calendar events
- Cost estimator
- Crop Indemnity Maps
- Crop Insurance Decision Tool (CIDT)
- Price Discovery Rej
- Rainfall-Veg Indices
- Summary of Busine

RMA's Priorities

- Bulletins and Handbooks
- County Crop Programs
- Fact Sheets
- Opportunities
- Partnership Agreements

- Census of Agriculture
- Civil Rights
- Farm Risk Plans
- Organic Crops
- Prevented Planting
- SRA

The Risk Management Safety Net: Buffalo, Analysis, Market Penetration, and Potential

www.rma.usda.gov

Popular Topics

- ▶ [Appendix III/M-13](#)
- ▶ [Bulletins and Handbooks](#)
- ▶ [Crop Policies and Pilots](#)
- ▶ [Federal Crop Insurance Corp](#)
- ▶ [Field Offices: ROs | COs](#)
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- ▶ [Livestock Policies](#)
- ▶ [Reinsurance Agreements](#)

Rainfall and Vegetation Indices

The Rainfall and Vegetation Index plans of insurance are designed as risk management tools to insure against declines in an index in a designated area called a grid. They are primarily intended for use by producers whose crop production tends to follow the average precipitation or vegetation patterns for the grid. It is possible for you to have low crop production on the acreage that you insure and still not receive a payment under these plans. Because the program is designed for producers whose crop production tends to follow average patterns and not individual crop production, you should review the historical indices, additional tools, and information provided to determine if these programs are suitable for your risk management needs.

Rainfall Index (RI)

Rainfall Index (RI) is based on weather data collected and maintained by [NOAA's Climate Prediction Center](#). The index reflects how much precipitation is received relative to the long-term average for a specified area and timeframe.

- Crops covered:
 - [Annual Forage](#)
 - [Apiculture](#)
 - [Pasture, Rangeland, Forage \(PRF\)](#)

Click on PRF link for RI



Vegetation Index (VI)

Vegetation Index (VI) is based on the [U.S. Geological Survey's Earth Resources Observation and Science \(EROS\)](#) normalized difference vegetation index (NDVI) data derived from satellites observing long-term changes in greenness of vegetation of the earth since 1989.

- Crops covered:
 - [Apiculture](#)

Contact Information

Popular Topics

- ▶ [Appendix III/M-13](#)
- ▶ [Bulletins and Handbooks](#)
- ▶ [Crop Policies and Pilots](#)
- ▶ [Federal Crop Insurance Corp](#)
- ▶ [Field Offices: ROs | COs](#)
- ▶ [Frequently Asked Questions](#)
- ▶ [Information Browser](#)
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- ▶ [Livestock Policies](#)
- ▶ [Reinsurance Agreements](#)

Pasture, Rangeland, Forage

Pasture, Rangeland, and forages cover approximately 55 percent of all U.S. land. Forage grows differently in different areas, so it's important for farmers and ranchers to know which types and techniques work best for their region. The following insurance program is available for Pasture, Rangeland, and Forage (PRF). Also see [livestock policies](#) or [PRF NAP Table](#).

PRF Archive

New

- [USDA Encourages Farmers and Ranchers to Take Advantage of Safety Net Tools for Livestock Operations](#)
- [Pasture, Rangeland, Forage Pilot Insurance Program Fact Sheet](#)
- [Summary Overview of Rainfall Index Insurance plan for Pasture, Rangeland, and Forage](#)
- [Pasture, Rangeland, Forage FAQs](#)
- [Rainfall Index and Vegetation Index Pasture, Rangeland, and Forage General Program Overview](#)
- [Rainfall Index Pasture, Rangeland, and Forage Technology](#)
- [Rainfall Index and Vegetation Index Pasture, Rangeland, and Forage Shares](#)
- [Rainfall Index and Vegetation Index Pasture, Rangeland, and Forage Tools](#)

Rainfall Index (RI) - is based on weather data collected and maintained by [NOAA's Climate Prediction Center](#). The index reflects how much precipitation is received relative to the long-term average for a specified area and timeframe.

- [County Availability \(PDF\): Map | Text](#)
- [Basic Provisions \(PDF\)](#)
- [Policy Provisions \(PDF\)](#)
- [Insurance Standards Handbook \(PDF\) \(Revised Apr 2013\)](#)
- [Grid ID Locator, Decision Support Tool, Historical Indices](#)



Click on tools link for RI

Net Hay Production Index was terminated beginning with the 2009 crop year. [Archive](#)

Find a Location:

Search

Enter name, address, or latitude/longitude values. [More Info](#)

Vegetation

Rainfall

Grids: Counties: Marker Info:
Labels: Labels: Degrees Decimal

Google Maps

Current Location

Grid ID: 16320
Latitude: 33° 30' 17.13" N
Longitude: 100° 11' 43.13" W
County: King
State: Texas
Address: Unnamed Road, Texas, USA

Grid Tools:

- [Decision Support Tool](#)
- [Historical Rainfall Indices](#)
- [View Actuarial Info](#)
- [View Cost Estimator](#)

Steps

1. Enter nearest town or address
2. Click Search
3. Navigate to property
4. Click a point on property
5. Print view for records
6. Note the Grid ID
7. Choose grid tool to view data



Grid Locator tool is used to find your Grid ID



Current Location

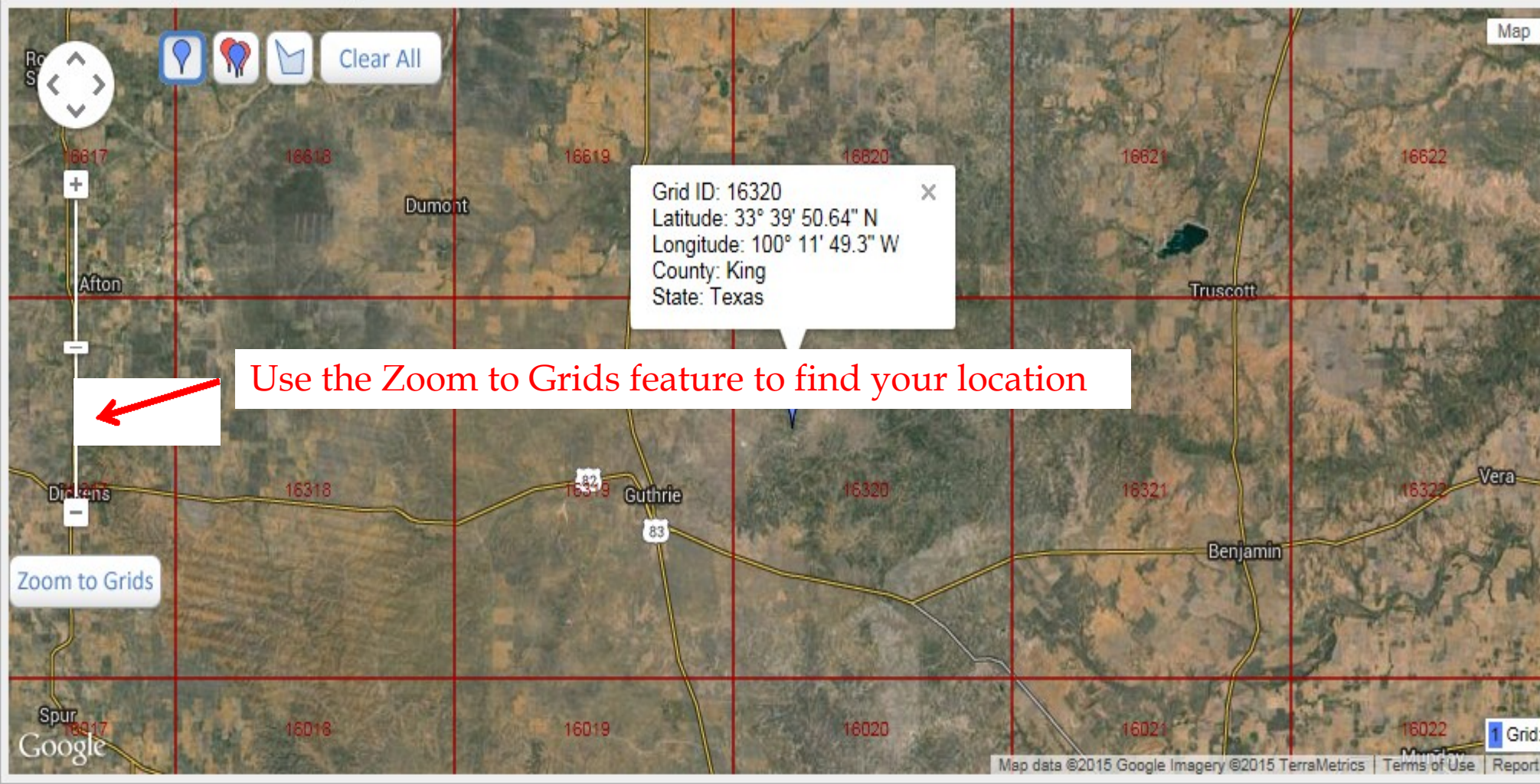
Grid ID: 16320
Latitude: 33° 39' 50.64" N
Longitude: 100° 11' 49.3" W
County: King
State: Texas
Address: 1307-1401 County Road 257, Guthrie, TX 79236, USA

Grid Tools:

- [Decision Support Tool](#)
- [Historical Rainfall Indices](#)
- [View Actuarial Info](#)
- [View Cost Estimator](#)

Steps

1. Enter nearest town or address
2. Click Search
3. Navigate to property
4. Click a point on property
5. Print view for records
6. Note the Grid ID
7. Choose grid tool to view data



Map interface showing a grid overlay on a satellite image of a rural area. A red arrow points to the 'Zoom to Grids' button. A tooltip for Grid ID 16320 is visible.

Grid ID: 16320
Latitude: 33° 39' 50.64" N
Longitude: 100° 11' 49.3" W
County: King
State: Texas

Use the Zoom to Grids feature to find your location



Find a Location:

Search

Enter name, address, or latitude/longitude values. [More Info](#)

Vegetation

Rainfall

Grids:

Counties:

Marker Info:

Labels:

Labels:

Degrees

Decimal

Google Maps

Print

Current Location

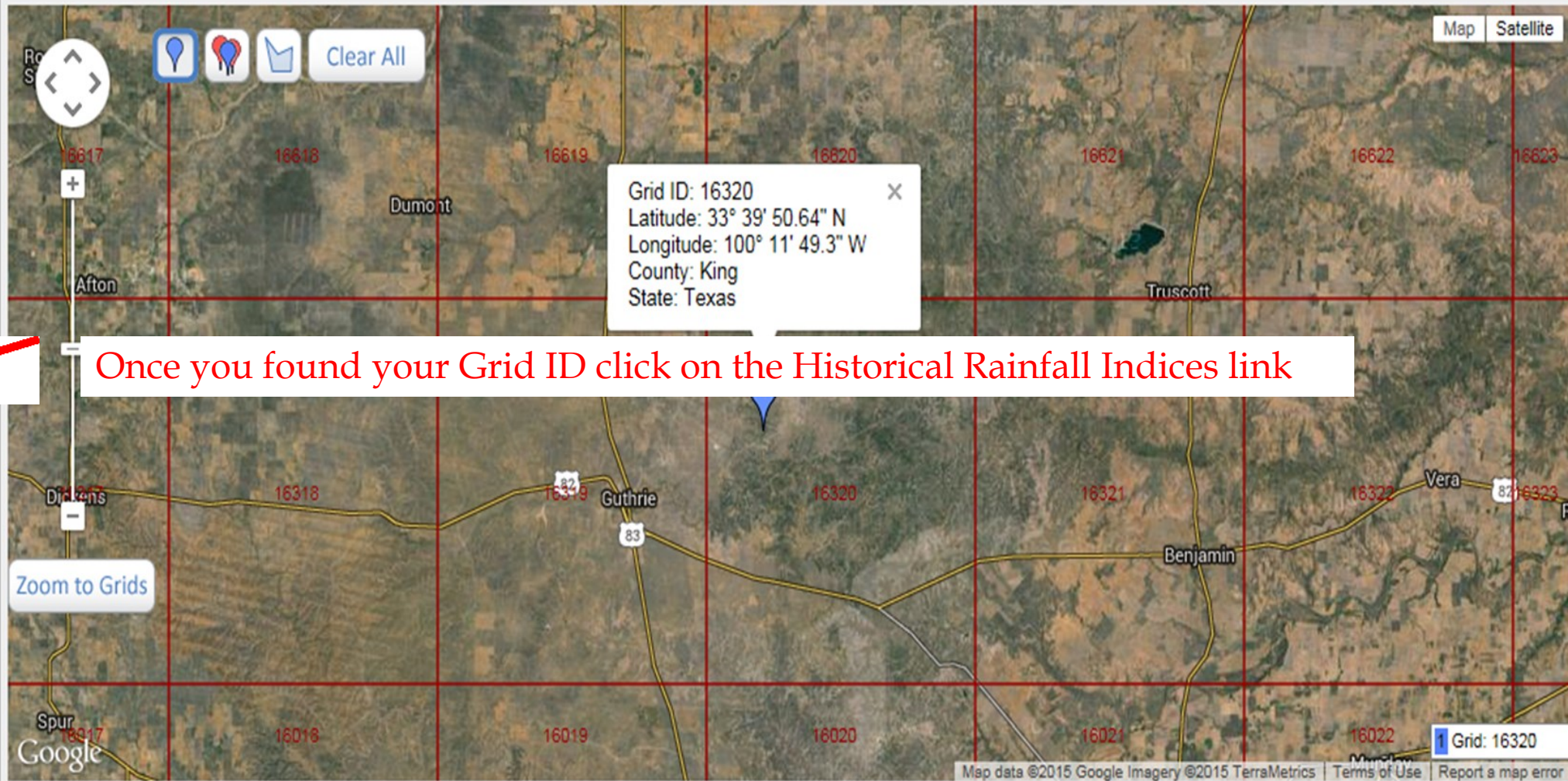
Grid ID: 16320
Latitude: 33° 39' 50.64" N
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County: King
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Address: 1307-1401 County Road
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Grid Tools:

- [Decision Support Tool](#)
- [Historical Rainfall Indices](#)
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Steps

1. Enter nearest town or address
2. Click Search
3. Navigate to property
4. Click a point on property
5. Print view for records
6. Note the Grid ID
7. Choose grid tool to view data



Once you found your Grid ID click on the Historical Rainfall Indices link

Decision Support Tool

Pasture, Rangeland, Forage

This tool is for illustration purposes only. Your actual information may differ. For additional information, please [click here](#).

Rainfall

Vegetation

Please Select a Location:

State:

County:

Grid:



Protection Information



Intended Use:

Coverage Level (%):

Productivity Factor (%):

Insurable Interest (%):

Insured Acres:

Sample Year:

Refine the results

Graph



Type:

Index Values Estimated Indemnities

Range:

Start End

Intervals:

Jan-Feb Feb-Mar Mar-Apr
 Apr-May May-Jun Jun-Jul

Table

Graph

Click on graph view to view historical results

Graph View Chart View

Year	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec
2015	119.6	82.0	130.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2014	26.6	29.4	19.8	69.4	106.9	127.8	126.8	134.8	95.6	73.9	98.6
2013	174.7	96.6	42.3	46.5	77.8	121.8	95.2	85.8	68.4	25.9	100.3
2012	44.3	79.9	80.4	42.4	64.4	89.2	99.9	129.3	72.7	7.5	21.6
2011	31.4	25.3	4.6	31.4	30.0	6.5	0.3	8.6	61.9	120.9	165.2
2010	194.0	137.4	248.0	166.6	71.2	168.8	207.6	126.3	106.4	58.6	34.7
2009	25.9	46.8	169.6	138.5	95.9	131.2	111.0	109.3	140.7	92.2	57.5
2008	17.9	51.2	90.0	97.6	116.0	121.9	107.5	111.3	120.8	96.9	4.6
2007	77.6	149.2	149.8	95.4	154.0	149.4	133.7	126.1	43.4	12.3	65.3
2006	24.7	95.4	129.2	125.9	83.4	41.0	77.9	94.3	161.4	167.7	93.0
2005	152.7	106.7	46.2	42.4	64.2	107.6	196.9	153.2	97.8	76.1	4.9
2004	265.7	222.6	158.8	51.9	120.6	219.0	150.9	61.5	77.5	329.7	425.5
2003	10.1	21.7	49.8	52.5	92.2	86.8	25.0	55.2	36.5	28.2	44.6
2002	99.1	144.8	203.4	81.4	58.4	167.3	153.9	44.2	133.6	185.8	158.8
2001	144.1	186.3	103.1	49.7	61.6	35.1	47.2	79.1	42.5	102.2	195.3
2000	51.5	227.3	198.9	46.8	79.3	83.7	6.4	1.0	46.6	151.4	187.7
1999	126.6	115.0	133.9	152.6	169.4	109.2	37.9	39.0	39.7	23.4	21.1
1998	165.2	192.4	96.6	43.2	33.6	22.4	62.5	46.7	49.3	103.5	79.5
1997	205.8	160.9	196.8	166.3	98.4	127.1	125.8	97.5	103.4	104.1	163.6
1996	19.7	43.2	22.9	14.4	49.4	89.2	149.2	201.1	149.1	91.2	99.2

Decision Support Tool

Pasture, Rangeland, Forage

This tool is for illustration purposes only. Your actual information may differ. For additional information, please [click here](#).

Rainfall

Vegetation

Please Select a Location:

State: Texas

County: King

Grid: 16320



Protection Information

Intended Use: Grazing

Coverage Level (%): Please Select

Productivity Factor (%): 100

Insurable Interest (%): 100

Insured Acres:

Sample Year: 2015

Graph

Type:

Index Values Estimated Indemnities

Range:

Start 1991 End 2015

Intervals:

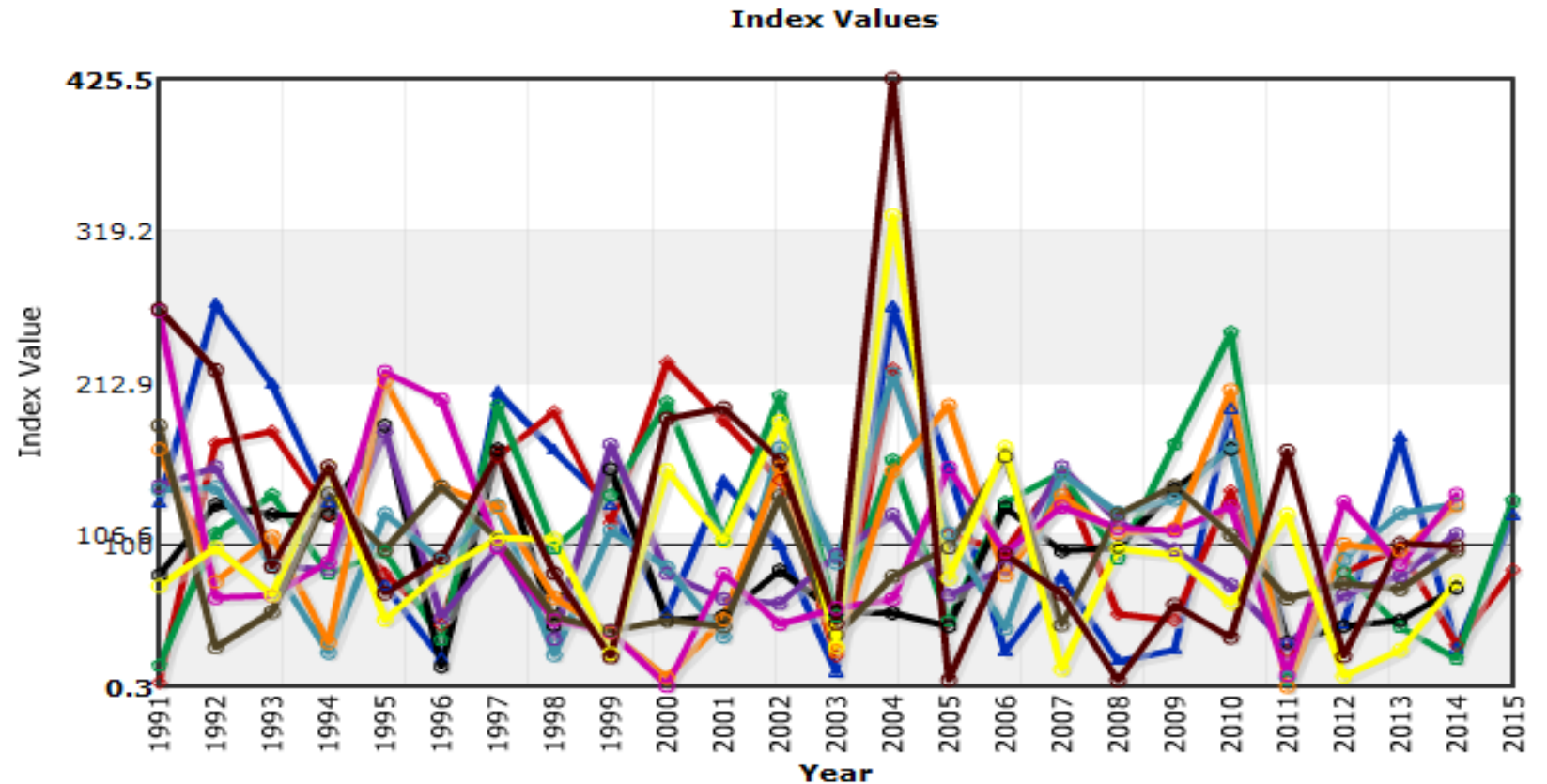
- Jan-Feb
- Feb-Mar
- Mar-Apr
- Apr-May
- May-Jun
- Jun-Jul

Table

Graph

Graph

Click on graph view



Decision Support Tool

Pasture, Rangeland, Forage

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Rainfall

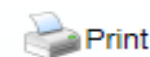
Vegetation

Please Select a Location:

State:

County:

Grid:



Protection Information

Intended Use:

Coverage Level (%):

Productivity Factor (%):

Insurable Interest (%):

Insured Acres:

Sample Year:

Graph

Type:

Index Values Estimated Indemnities

Range:

Start End

Intervals:

Jan-Feb Feb-Mar Mar-Apr
 Apr-May May-Jun Jun-Jul

Table

Graph

Click on table to get back to DST tools

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	<input type="text"/>							
Feb-Mar	<input type="text"/>							
Mar-Apr	<input type="text"/>							
Apr-May	<input type="text"/>							
May-Jun	<input type="text"/>							
Jun-Jul	<input type="text"/>							
Jul-Aug	<input type="text"/>							
Aug-Sep	<input type="text"/>							
Sep-Oct	<input type="text"/>							
Oct-Nov	<input type="text"/>							
Nov-Dec	<input type="text"/>							
Per Acre	N/A	N/A	N/A				N/A	
Policy Total			N/A				N/A	

Enter all required information

Select Percent of Value % for each interval you want to insure

County Base Value
Dollar Amount of Protection
Total Insured Acres
Total Premium
Premium Subsidy
Producer Premium
Actual Index Value
Maximum Percent of Value per Index Interval

Calculate

Once you entered all required information click the Calculate button

Please Select a Location:

State:

County:

Grid:



Protection Information

Intended Use:

Coverage Level (%):

Productivity Factor (%):

Insurable Interest (%):

Insured Acres:

Sample Year:

Graph

Type:

Index Values Estimated Indemnities

Range:

Start End

Intervals:

Jan-Feb Feb-Mar Mar-Apr
 Apr-May May-Jun Jun-Jul

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		\$0	30.82	\$0	\$0	\$0	174.7	\$0
Feb-Mar		\$0	26.01	\$0	\$0	\$0	96.6	\$0
Mar-Apr	N/A	\$0	23.74	\$0	\$0	\$0	42.3	\$0
Apr-May	50	\$81,207	19.88	\$16,144	\$8,233	\$7,911	46.5	\$39,250
May-Jun	N/A	\$0	17.22	\$0	\$0	\$0	77.8	\$0
Jun-Jul	N/A	\$0	19.69	\$0	\$0	\$0	121.8	\$0
Jul-Aug	50	\$81,207	23.47	\$19,059	\$9,720	\$9,339	95.2	\$0
Aug-Sep	N/A	\$0	25.49	\$0	\$0	\$0	85.8	\$0
Sep-Oct		\$0	23.68	\$0	\$0	\$0	68.4	\$0
Oct-Nov		\$0	28.93	\$0	\$0	\$0	25.9	\$0
Nov-Dec		\$0	32.43	\$0	\$0	\$0	100.3	\$0
Per Acre	N/A	N/A	N/A	\$35.20	\$17.95	\$17.25	N/A	\$39.25
Policy Total	1,000	\$162,414	N/A	\$35,203	\$17,953	\$17,250	N/A	\$39,250

County Base Value	\$180.46
Dollar Amount of Protection	\$162.41
Total Insured Acres	1,000
Total Policy Protection	\$162,414
Subsidy Level	51.0%

Calculate

Results from 2013



Historical Indices and Decision Support Tool

- Actuarial information will not change.
 - Actual Final Grid Index for past years.
- Tools are designed to be fluid and will change:
 - Updated annually; and
 - Final Grid Index values will reflect the change in average.



Questions?

Email: rma.kcviri@rma.usda.gov