



United States
Department of
Agriculture



Federal Crop
Insurance
Corporation

FCIC-18150 (10-2022)

RAINFALL INDEX INSURANCE STANDARDS HANDBOOK

2023 and Succeeding Crop Years

THIS PAGE IS INTENTIONALLY LEFT BLANK

**UNITED STATES DEPARTMENT OF AGRICULTURE
FARM PRODUCTION AND CONSERVATION
RISK MANAGEMENT AGENCY
KANSAS CITY, MO 64133**

TITLE: Rainfall Index Insurance Standards Handbook	NUMBER: FCIC-18150 OPI: Product Administration and Standards Division
EFFECTIVE DATE: August 31, 2022	ISSUE DATE: October 13, 2022
SUBJECT: Provides the insurance standards for the Rainfall Index Plans of Insurance.	APPROVED: <i>/s/ Richard Flournoy</i> Deputy Administrator for Product Management

REASON FOR ISSUANCE

This handbook provides the official FCIC-approved underwriting, administration, and review standards for the Rainfall Index plans of insurance for the 2023 and succeeding crop years for crops with a contract change date on or after the issue date.

SUMMARY OF CHANGES

Listed below are the changes to the 2023 FCIC-18150 Rainfall Index Insurance Standards Handbook with significant content change. All changes, and additions are highlighted. Minor changes and corrections are not included in this listing. *** used throughout the handbook indicate where major deletions occurred.

Reference	Description of Change
Throughout	-Formatting updates throughout to comply with the External Handbook Standards (EHS). -All examples and instances of pronoun use have been changed to gender neutral.
Para. 1C.	Page 1: Added required civil rights language.
Exhibit 2	Page 34: Clarified the definitions of “expected grid index,” and “final grid index,” to state the NOAA CPC data and index intervals are based on a 24-hour period determined by the data.

RISK MANAGEMENT AGENCY RAINFALL INDEX INSURANCE STANDARDS HANDBOOK

CONTROL CHART

	TP Page(s)	TC Page(s)	Text Page(s)	Exhibit Page(s)	Date	Directive Number
Current Index	1-2	1-2	1-32	33-51	09-2022	FCIC-18150

FILING INSTRUCTIONS

This handbook replaces the FCIC-18150 Rainfall and Vegetation Index Insurance Standards Handbook issued in August 2021. This handbook is effective for the 2023 and succeeding crop years and is not retroactive to any prior crop year determinations.

RAINFALL INDEX INSURANCE STANDARDS HANDBOOK

TABLE OF CONTENTS

PART 1: GENERAL INFORMATION AND RESPONSIBILITIES	1
1 General Information.....	1
2 Terminology for Apiculture	3
3 Disclaimer Statements	3
4 Responsibilities.....	3
5-10 Reserved.....	4
PART 2: RAINFALL INDEX COMMON PROCEDURES.....	5
11 Overview	5
12 Provisions Not Applicable to Rainfall Index Plans.....	5
13 Productivity Factor	5
14 Percent of Value.....	6
15 Selecting a Grid	6
16 Intended Use.....	6
17 Forms and Statements	7
18 Acreage Reports	7
19 Quality Control Reviews	8
20 Loss Adjustment.....	8
21-30 (Reserved)	8
PART 3: RAINFALL INDEX.....	9
31 Rainfall Index Design	9
32 Grid Area and Index Intervals.....	9
33 Precipitation Data	11
34 Cause of Loss and Indemnity Payments	12
35-70 (Reserved)	12
PART 4: IDENTIFYING ACREAGE AND GRID ID.....	13
71 Use of RMA Website	13
72 Grid Locator.....	13
73 Identifying Acreage	14
74 Point of Reference.....	17
75 Noncontiguous Acreage – Point of Reference.....	20
76 Contiguous Acreage – Point of Reference	25

RAINFALL INDEX INSURANCE STANDARDS HANDBOOK

TABLE OF CONTENTS

EXHIBITS33

Exhibit 1 Acronyms and Abbreviations.....33

Exhibit 2 Definitions34

Exhibit 3 Lease Certification Form.....35

Exhibit 4 Rainfall Index Disclaimers37

Exhibit 5 Rainfall Index - Pasture, Rangeland, Forage Example38

Exhibit 6 Insurable Interest for Pasture, Rangeland, Forage with Intended Use of Grazing46

Exhibit 7 Apiculture Leases51

PART 1: GENERAL INFORMATION AND RESPONSIBILITIES

1 General Information

A. Purpose and Objective

This handbook provides procedures and information for administering the Rainfall Index plans of insurance.

If there is a conflict between this handbook and the CIH or other FCIC approved handbook, this handbook controls. If there is a conflict between this handbook and the policy, the policy controls.

B. Source of Authority

The RI plans of insurance are authorized under Section 522(c) of the Federal Crop Insurance Act. Initially the only crop covered was PRF. However, other products that utilize the provisions of the RI plans of insurance were approved by the FCIC Board of Directors under Section 508(h) of the Federal Crop Insurance Act.

The PRF program is an RMA developed product approved by the FCIC Board of Directors under Section 522(c) of the Federal Crop Insurance Act. The apiculture and the AF programs are privately developed products approved by the FCIC Board of Directors under Section 508(h) of the Federal Crop Insurance Act.

C. Title VI of the Civil Rights Act of 1964

The USDA prohibits discrimination against its customers. Title VI of the Civil Rights Act of 1964 provides that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Therefore, programs and activities that receive Federal financial assistance must operate in a non-discriminatory manner. Also, a recipient of RMA funding may not retaliate against any person because they opposed an unlawful practice or policy, or made charges, testified or participated in a complaint under Title VI.

It is the AIPs’ responsibility to ensure that standards, procedures, methods and instructions, as authorized by FCIC in the sale and service of crop insurance contracts, are implemented in a manner compliant with Title VI. Information regarding Title VI of the Civil Rights Act of 1964 and the program discrimination complaint process is available on the USDA public website at www.ascr.usda.gov. For more information on the RMA Non-Discrimination Statement see the DSSH.

D. Duration

The Apiculture, Annual Forage and PRF programs will continue until cancelled by FCIC or no premium rate is filed for the crop.

E. AIP Option to Offer

Because apiculture and the AF programs are privately developed products, AIPs are not required to offer them. Accordingly, each AIP must determine whether they will offer the apiculture or the AF program. AIPs that elect to offer the apiculture or the AF program must offer it to all eligible producers and must administer the program according to the Rainfall Index plans of insurance, apiculture or AF crop provisions, and the procedures in this handbook.

Because the PRF program is an RMA developed product, AIPs are required to offer it to all eligible producers and must administer it according to the Rainfall Index plans of insurance, PRF crop provisions, and the procedures in this handbook.

F. Related Handbooks

The following table provides handbooks related to this handbook.

Handbook	Relation/Purpose
DSSH	This handbook provides the official FCIC approved form standards and procedures for use in the sale and service of any eligible Federal crop insurance policy; required statements and disclosures; and the standards for submission and review of non-reinsured supplemental policies in accordance with the SRA.
GSH	This handbook provides the official FCIC approved standards for policies administered by AIPs under the General Administrative Regulations, Common Crop Insurance Policy Regulations Basic Provisions, including the Catastrophic Risk Protection Endorsement, Actual Production History Regulation Subpart G; the Area Risk Protection Insurance Regulations Basic Provisions; the Stacked Income Protection Plan of Insurance; the Rainfall Index Plan; and the Whole Farm Revenue Protection Pilot Policy.

G. AIPs and Agents

AIP's may authorize contracted agents to perform all functions and actions provided in this handbook, except for:

- (1) determining whether to offer the Apiculture or AF according to subparagraph D;
- (2) reviews; and
- (3) developing forms and certification statements.

2 Terminology for Apiculture

For ease in the administration of the terms and to avoid the duplication of this handbook or parts of this handbook, when referring to apiculture or the apiculture crop provisions in this handbook the term “acre” is replaced with “colony” and “acres” and “acreage” are replaced with “colonies.”

Exception: When referring to “contiguous acreage” the term “acreage” is not replaced with “colonies.”

Exception: When referring to “located on acreage” the term “acreage” is not replaced with “colonies.”

3 Disclaimer Statements

Insureds must sign and be provided a copy of the applicable disclaimer statement provided in [exhibit 4](#). The disclaimer statements provide general information about how the Rainfall Index plans of insurance work and certain aspects of the plans the insured needs to understand.

AIPs must not modify the disclaimers statements provided in [exhibit 4](#).

4 Responsibilities

A. AIP’s Responsibilities

- (1) must provide persons insured under the Rainfall Index plans of insurance a copy of the Rainfall Index Plan Common Policy and the applicable crop policy;
- (2) must report any program issues or concerns related to the Rainfall Index plans of insurance or associated crop policies to RMA, Director of PASD;
- (3) electing to offer the apiculture or AF programs must offer the program(s) to all eligible producers in the area where the program is offered;
- (4) must offer the PRF program to all producers where the program is offered; and
- (5) must report the latitude and longitude of the point of reference on the acreage report. This can be obtained from the grid locator map from the RMA website, or an AIP’s mapping software.

4 Responsibilities (Continued)

B. Insured's Responsibilities

To be insured under the Rainfall Index plans of insurance, an insured must:

- (1) comply with all terms and conditions of the policy; and
- (2) when completing their application, sign applicable disclaimer statement in [exhibit 4](#).

5-10 Reserved

PART 2: RAINFALL INDEX COMMON PROCEDURES

11 Overview

This part provides procedures that are common to the Rainfall Index plans of insurance.

12 Provisions Not Applicable to Rainfall Index Plans

The following are not applicable to the Rainfall Index plans of insurance.

- (1) Hail and fire exclusion provisions.
- (2) High-risk land exclusion option/provisions.
- (3) Late planting provisions.
- (4) Replant provisions, except as they apply to first and second crop provisions.
- (5) Replanting payment provisions.
- (6) Prevented planting provisions.
- (7) Experience adjustment factors.
- (8) Production reporting.
- (9) Optional units.
- (10) Enterprise units.
- (11) Whole farm units.

13 Productivity Factor

The Rainfall Index plans of insurance utilize a productivity factor that allows the insured to individualize their coverage based on the productivity of the acreage insured. Insureds may elect a productivity factor between 60 percent and 150 percent, in 1 percent increments, and only one productivity factor can be selected by county, crop, and intended use.

Example: Insured A is insuring alfalfa acreage with an intended use of haying in a county with a county base value of \$269.54 per acre. Insured A believes the alfalfa acreage has a greater value than the county base value and selects a productivity factor of 115, thereby increasing the dollar amount of protection per acre by 15 percent. If insured A believed the alfalfa acreage had less value than the county base value, a productivity factor less than 100 could have been selected, thereby reducing the dollar amount of protection per acre.

14 Percent of Value

Insureds must allocate, on their application, a percent of value to each unit. The percent of value allows insureds with more than one unit to individualize their coverage within the requirements of the program. Using the percent of value, insureds can allocate a percentage of the total insured value to each selected index interval.

Example: Insured A has a 100 percent share in 1,000 insurable acres in the grid and elects to insure all 1,000 acres with an intended use of grazing. The county base value is \$20.00 per acre. Insured A selects a 90 percent coverage level, 120 percent productivity factor, and the April - May and July - August index intervals.

The dollar amount of protection per acre is \$21.60 ($\$20.00 \times .90 \times 1.20$), and the total policy protection is \$21,600 ($\$21.60 \times 1,000$ acres). Insured A allocates 60 percent of the total value to the April - May index interval and 40 percent to the July - August index interval.

Based on Insured A's allocation, the policy protection amount for the unit comprised of the April - May index interval is \$12,960 ($\$21.60 \times 1,000$ acres \times 60 percent of value \times 1.00 share). The policy protection amount for the unit comprised of the July - August index interval is \$8,640 ($\$21.60 \times 1,000$ acres \times 40 percent of value \times 1.00 share). The total policy protection amount (\$21,600) does not change.

Regardless of how the total value is allocated between index intervals, the sum of the percentages for all index intervals, by grid ID, share, irrigated practice, organic practice (if applicable), and intended use, must equal 100 percent.

There may be a minimum and maximum percent of value that can be allocated to an index interval. See the crop provisions and actuarial documents for more information about minimum and maximum amounts that may be allocated.

15 Selecting a Grid

The insured must select the grid where the insured acreage is physically located, or assigned if contiguous acreage, by providing a point of reference. The grid must be selected using the maps contained on RMA's website or an AIP's mapping software.

See [Part 3](#) for information about the grid size for the Rainfall Index plan.

See [Part 4](#) for instructions on how to select a grid.

16 Intended Use

PRF acreage must be reported and insured with an intended use of either haying or grazing, as selected by the insured.

Under no circumstances can the same acreage be reported or insured with an intended use of both haying and grazing in the same crop year. If the insured intends to hay and graze the acreage to be insured and the acreage meets the requirements to be insured as either, the insured must select only one intended use for the acreage.

17 Forms and Statements

The DSSH procedures and standards for forms must be adhered to unless otherwise specified in this handbook. [Exhibit 4](#) provides disclaimer statements that must be signed by each person insured under the Rainfall Index plans of insurance.

18 Acreage Reports

Insureds must provide all required reports and are responsible for the accuracy of all information contained in those reports. Inaccurate information reported on the acreage report can result in over- and under-reported liability.

A. Modifying Acreage Reports

On or before the acreage reporting date, an insured may modify their acreage report for any reason. After the acreage reporting date an acreage report may be modified only:

- (1) to correct a clear error, such as the number of acres reported was 871.0 instead of 87.1; and
- (2) if the AIP agrees to the modification.

Acreage reports modified after the acreage reporting date must be identified as “corrected.”

B. Verifiable Records

Insureds must have verifiable records to support the information on their acreage report. Insureds are not required to submit records unless requested by the AIP or RMA for an audit and review.

For Apiculture: Acceptable types of records to verify the insured colonies may include, but are not limited to:

- (1) Federal or State reporting systems that capture the location of the colonies;
- (2) FSA reports;
- (3) tax records;
- (4) transportation invoices;
- (5) purchase agreements;
- (6) bills of sale;
- (7) pollination contracts; or
- (8) queen bee purchases.

18 Acreage Reports (Continued)

B. Verifiable Records (Continued)

Insured colonies do not have to equal insurable colonies for the insured; however, the insured colonies cannot exceed insurable colonies for the crop year. In addition, the total insurable colonies cannot exceed the highest number of insurable colonies in the previous three years unless the insured can provide documentation that supports the number of colonies they want to insure. The insured's records can be obtained from the previous three years to verify the insured amount. If it is determined that insured colonies exceeded the number of insurable colonies, the insured will be subject to 9(f)(1) of the Basic Provisions.

19 Quality Control Reviews

The SRA, Appendix IV, provides the quality control review requirements for Rainfall Index policies.

20 Loss Adjustment

There are no loss adjustment activities under the Rainfall Index plans of insurance.

21-30 (Reserved)

PART 3: RAINFALL INDEX

31 Rainfall Index Design

The Rainfall Index plan of insurance is a risk management tool to insure against a decline in an index value that is based on the long-term historical average precipitation for the grid and index interval. It is best suited for producers whose production tends to follow and correlate to the historical average precipitation patterns for the grid.

The Rainfall Index plan of insurance:

- (1) does not measure, capture, or utilize the actual crop production of any producer or any of the actual crop production within the grid; and
- (2) utilizes NOAA CPC gridded interpolated precipitation data.
- (3) The Rainfall Index is not “drought insurance” and does not insure against abnormally “high temperatures” or “windy conditions.”

See paragraph 33 for more information about NOAA CPC gridded precipitation data.

Historical indices information for each grid ID and index interval is available on RMA’s website. This information must be used by producers and agents to determine whether the producer’s production history follows and correlates to average precipitation patterns for the grid.

32 Grid Area and Index Intervals

A. Grid Area

Unlike other Federal crop insurance area plans of insurance that are based on county boundaries, the Rainfall Index plan of insurance utilizes a numbered grid system. Each grid covers an area equal to .25 degrees in latitude by .25 degrees in longitude. The grids do not follow state, county, or other geopolitical boundaries.

The grids for the Rainfall Index plan of insurance are created by NOAA CPC. Each grid is assigned a specific grid ID and is individually rated based on the NOAA CPC interpolated historical precipitation data for that grid.

B. Index Intervals

NOAA CPC gridded precipitation data is obtained, by grid, for the following 11 specific 2-month time periods, referred to as index intervals, during a year. Historical NOAA CPC gridded data since 1948 is also obtained, by grid, for each index interval.

B. Index Intervals (Continued)

- (1) January and February.
- (2) February and March.
- (3) March and April.
- (4) April and May.
- (5) May and June.
- (6) June and July.
- (7) July and August.
- (8) August and September.
- (9) September and October.
- (10) October and November.
- (11) November and December.

Not all index intervals are available in all counties. See the actuarial documents to determine which index intervals are available.

C. Selecting Index Intervals

A minimum of two index intervals must be selected for acreage insured under the Rainfall Index plan of insurance by the insured. Selection of index intervals is critical to the effectiveness of the Rainfall Index plan of insurance as a risk management tool.

Factors to be considered when determining which index intervals to select include, but are not limited to, type of forage or plant to be pollinated, location, elevation, intended use, and the time period when precipitation is needed under normal conditions for the insured crop.

Selecting index intervals when precipitation is not needed for the insured crop or when precipitation does not normally occur is not an effective use of the Rainfall Index plan of insurance nor is insuring periods when livestock or colonies will be on the property unless that corresponds to when precipitation is critical.

Example: Based on the location of the land, type of grass, and intended use, precipitation is needed in the months of March, April, May, and June for the grass to produce a normal amount of forage under normal conditions during the normal growing season. Selecting index intervals before March or after June would not be an effective use of the Rainfall Index plan of insurance because precipitation received during those index intervals is not as needed for the normal growing season.

A. NOAA CPC Precipitation Data

The NOAA CPC precipitation data is not simply the measurement of precipitation from a specific rain gauge(s) or reporting station(s) within a grid. Each day, NOAA CPC obtains data from a minimum of four reporting stations closest to the center of the grid that report data for that day. The closest reporting station may be located outside the grid for which the data will be used. Each day, different reporting stations may be used because not all reporting stations report data every day. Accordingly, the gridded precipitation data used is an interpolated value for the entire grid and cannot be traced to a single point or reporting station(s).

RMA does not receive the daily precipitation amount or which reporting station data was used. NOAA CPC data is accepted and used by other government agencies and private entities and undergoes a rigorous quality control process by the CPC to ensure accuracy.

B. Producer Precipitation Data

Precipitation data maintained by producers or any other source other than NOAA CPC is not used in any manner under the Rainfall Index plan of insurance.

The precipitation data used may not match the amount of precipitation received by a producer in a specific location(s) because it is an interpolated value for the entire grid and index interval.

C. Expected and Final Grid Index

An expected grid index is calculated for each grid ID and index interval using the long-term historical gridded precipitation data for the grid ID and index interval. The expected grid index represents the average precipitation for the grid ID during the index interval based on NOAA CPC data from 1948 to two years prior to the crop year.

Example: The expected grid indexes for 2013 crop year represents the average precipitation based on NOAA CPC data from 1948 through 2011.

A final grid index is based on NOAA CPC precipitation data and is expressed as a percentage. An index of 100 represents average precipitation, an index below 100 represents below average precipitation, and an index above 100 represents above average precipitation. Only the precipitation received during the index interval is used to determine a final grid index. Precipitation received during prior index intervals has no effect on the final grid index for subsequent index intervals.

Example: Precipitation received during the index interval that includes both April and May have no effect on the final grid index for the index interval that includes both June and July.

The NOAA CPC data used to calculate the expected and final grid index is conclusively presumed to be accurate unless it meets the criteria outlined in section 8(e) of the Rainfall Index Basic Provision. RMA does not alter the NOAA CPC data.

A. Cause of Loss

The Rainfall Index plan of insurance only covers a decline from the long-term historical normal interpolated precipitation for a grid and index interval, it does not cover other perils such as, but not limited to, flood, fire, and hail.

The Rainfall Index program is not “drought insurance.” While a drought may cause a decline in the index value to the point that an indemnity payment is issued to eligible insured producers, a drought being declared in a state, county or area does not, by itself, trigger an indemnity payment under the RI program.

B. Indemnity Payments

Indemnity payments are earned by eligible insureds only when the final grid index is less than the trigger grid index. The insured’s amount of production is not considered when determining eligibility for an indemnity payment.

Because the Rainfall Index plan of insurance is an area plan and does not measure, capture, or utilize any actual crop production, an insured may experience a loss of production and not receive an indemnity payment. However, it is also possible for an insured to receive an indemnity payment without suffering a loss of actual production.

The NOAA CPC data used to calculate the expected and final grid index is conclusively presumed to be accurate. RMA does not alter the NOAA CPC data.

35-70 (Reserved)

PART 4: IDENTIFYING ACREAGE AND GRID ID

71 Use of RMA Website

The grid ID is determined based on a point of reference selected by the insured using the interactive maps and tools on RMA’s website or an AIP’s mapping software. The point of reference must be provided using the maps and tools contained on RMA’s website or an AIP’s mapping software. RMA’s website allows a user to navigate through various pages to collect information, identify land, establish a point of reference and determine the grid ID.

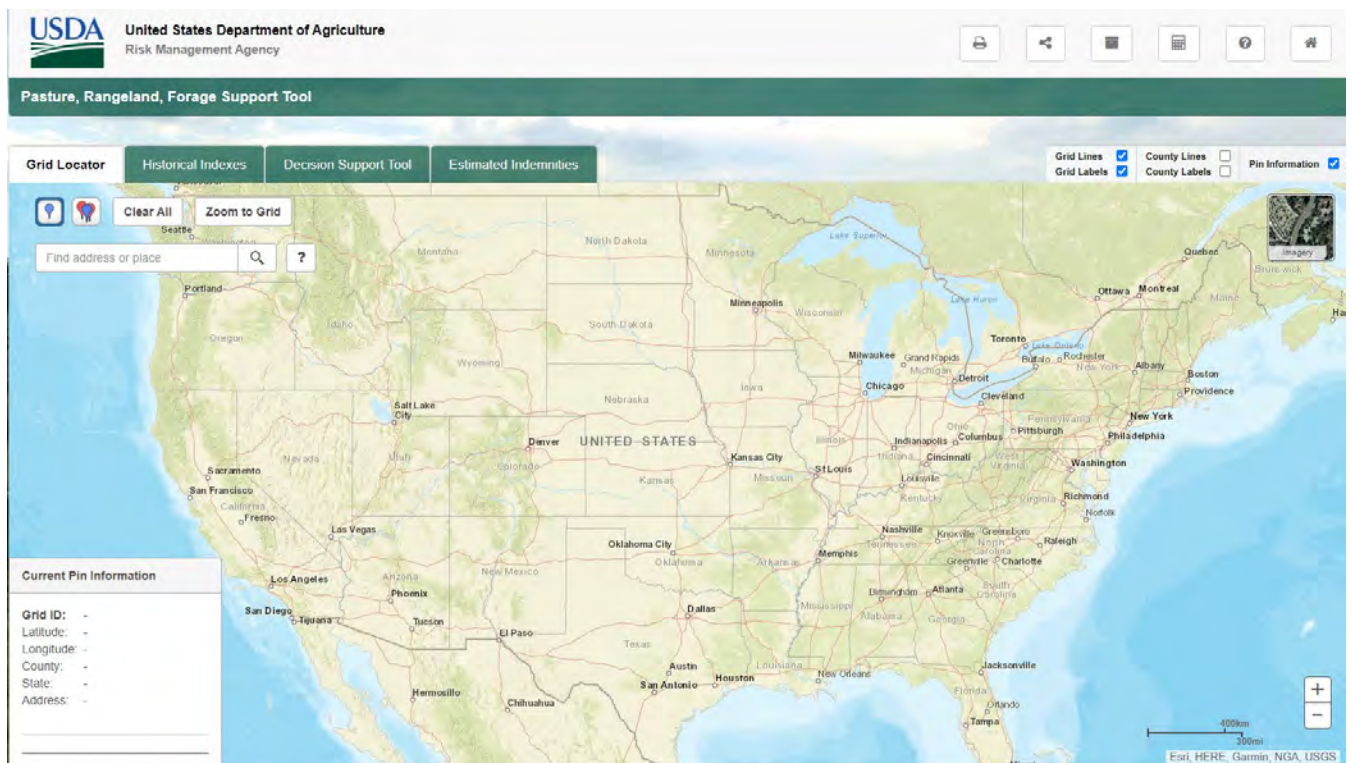
A direct link, titled “Grid ID Locator, Decision Support Tool, Historical Indices,” to the maps and tools is located on the specific crop page. The specific crop pages can be accessed from the Rainfall Indices page. The link takes the user to the “Grid Locator” page for the crop selected.

There are slight differences in the PRF (PRF), AF, and apiculture web pages; however, the basic design, core functionality, and navigation are similar between these programs.

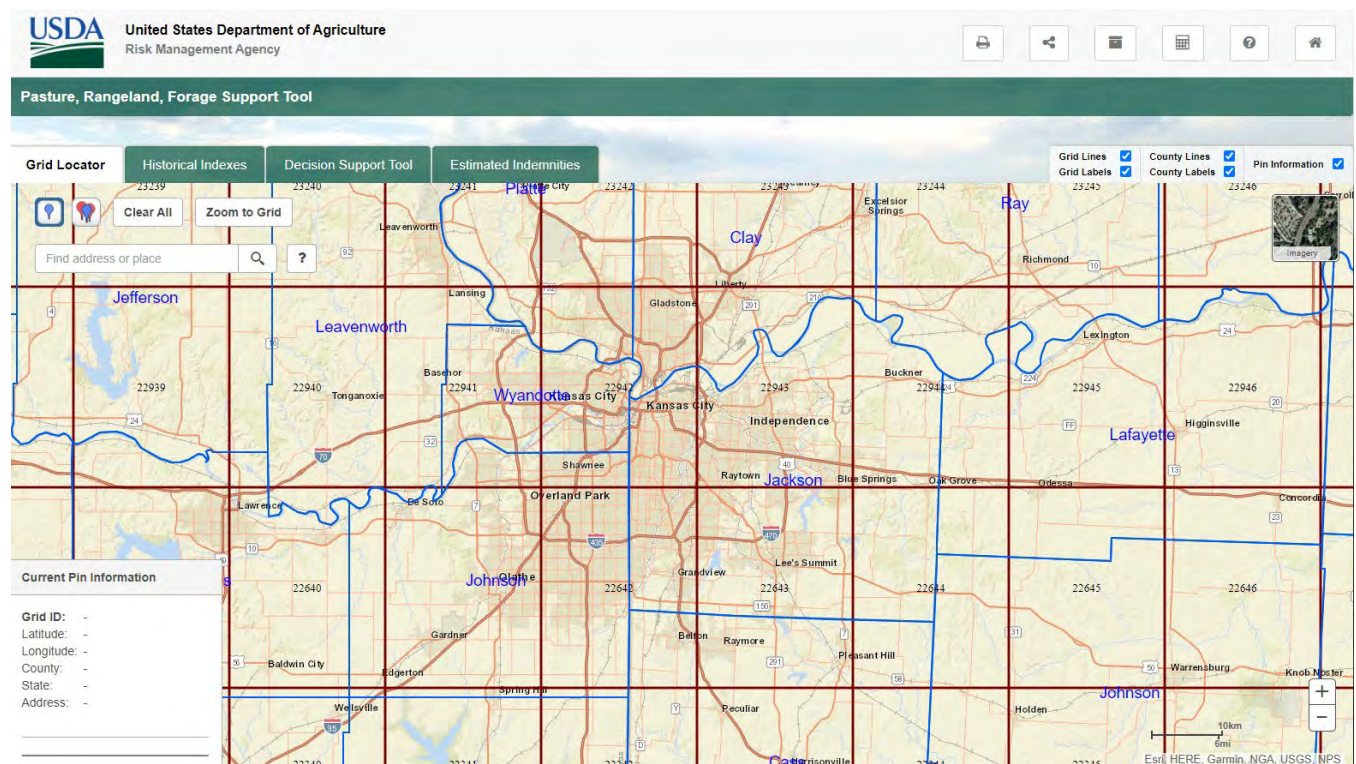
72 Grid Locator

The user may select different view options for the Grid Locator map. Options include the standard, which is the default, satellite, hybrid, and terrain map views. The map size can be changed by using the “Zoom to Grids” bar located to the left of the map. Grid IDs and boundaries and county names and boundaries can be displayed by selecting the applicable boxes located above the map. Additional tools and information are located to the left of the map.

The following is an example of the Grid Locator page for PRF.



The following is an example of the Grid Locator page for PRF zoomed in to display county names and boundaries and grid IDs and boundaries. In the example, the grid boundaries are outlined with red lines and the county boundaries are outlined with a blue line.



73 Identifying Acreage

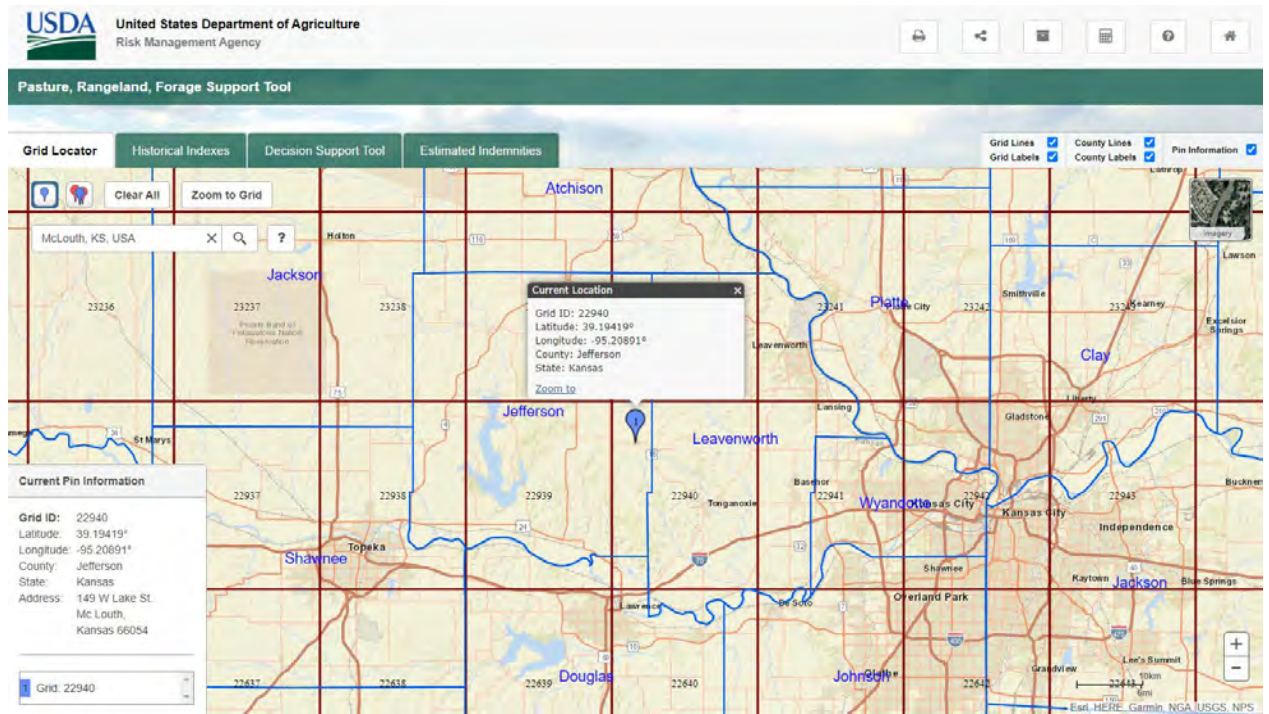
A. Locating an Insured's Acreage

The Grid Locator map and tools provide multiple options for identifying the insured's acreage to establish a point of reference and determine the grid ID. The following steps provide one method for locating the insured's acreage.

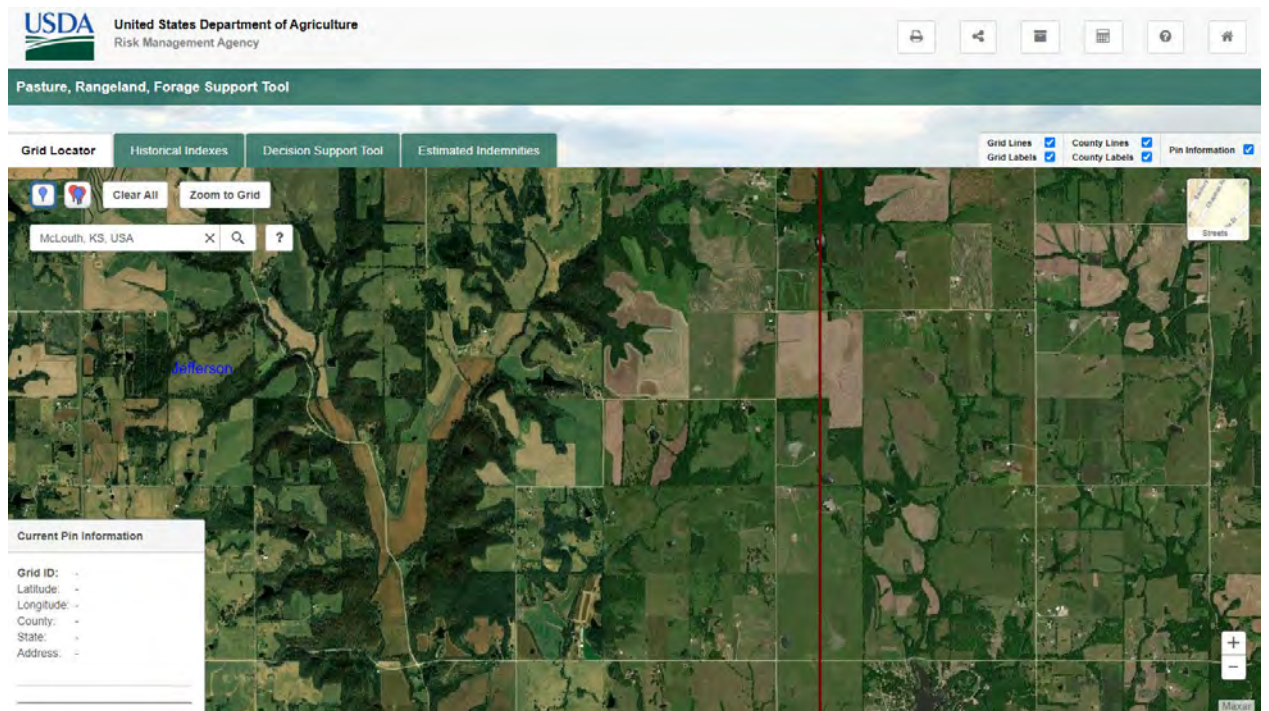
- (1) In the "Find address or place" search box located at the top of the Grid Locator page, enter the city and state near the acreage to be insured, or the county and state in which the acreage to be insured is physically located, then click the "Search" button.
- (2) Navigate close to where the acreage to be insured is physically located. Use of the zoom function and alternative map views may help identify roads, ponds, buildings, rivers, or other landmarks or features that will help navigate to the applicable acreage.
- (3) Use the zoom function and move the map to display the acreage to be insured in enough detail that a point of reference can be established within the field boundaries.

A. Locating an Insured’s Acreage (Continued)

The following is an example of the Grid Locator page for PRF when “McLouth, Kansas” is searched by using the search box.



The following is an example of the Grid Locator page for PRF using the imagery map view to navigate to acreage located a few miles from McLouth, Kansas using roads and other landmarks to locate the acreage.



B. Determining Grid ID

The point of reference selected by the insured will determine the grid ID and county. The insured must establish a point of reference for the acreage to be insured and reported on the acreage report for API and PRF.

Establish a point of reference by positioning the cursor within the boundaries of the acreage to be insured and clicking the left mouse button. A blue or red point of reference symbol will be displayed on the map where the point of reference is established. In addition, a popup information balloon containing the following for the point of reference will display.

- (1) Grid ID
- (2) Latitude
- (3) Longitude
- (4) County
- (5) State

The same information will display to the left of the map under “Current Location.” Use the zoom function and different map views to identify the acreage to be insured and ensure the point of reference is accurate and within the boundaries of acreage to be insured.

If the point of reference selected is not within the boundaries of the acreage to be insured, remove the point of reference by clicking the “Clear All” button in the upper left-hand corner of the map.

The following is an example of the Grid Locator page with a point of reference established for acreage located in grid ID 22939 a few miles from McLouth, Kansas.

The screenshot displays the USDA Risk Management Agency's "Pasture, Rangeland, Forage Support Tool" interface. The "Grid Locator" tab is active, showing a satellite map of a rural area in Kansas. A red pin is placed on a grid cell, and a popup window displays the following information: Grid ID: 22939, Latitude: 39.16154°, Longitude: -95.26987°, County: Jefferson, State: Kansas. Below the map, a "Current Pin Information" panel shows the same details and an address: Oskaloosa, Kansas 66065. The search bar at the top left contains "McLouth, KS, USA".

The point of reference identifies the acreage to be insured and determines the grid ID. Insureds may need to provide multiple points of reference depending on the acreage and crop insured.

Important: A latitude and longitude for each point of reference must be reported on the acreage report. The latitude and longitude must be obtained from the grid locator map from the RMA website, or an AIP’s mapping software.

Important: The same acres cannot be insured in more than one grid ID or county. The total amount of an insured’s insured acres of the crop in a county cannot exceed 100 percent of the insured’s insurable acreage of the crop in the county.

Important: Some grids cross the U.S. Border (e.g., into Canada or Mexico, or out into a body of water) and no insurance offer is available for that partial grid ID. If an insured has acreage in that partial grid, the insured can cover that acreage under the closest grid ID with an insurance offer. AIP’s must keep documentation identifying the original location grid ID. Only acres located within the United States can be insured.

The following table provides a reference for determining how many points of references are needed.

IF the crop is...	AND the acreage is...	AND the intended use and practices (where applicable) is...	AND the insured chooses to...	THEN the insured must establish a point of reference...
PRF	Noncontiguous	the same for all the acreage		within the acreage boundaries for each of the noncontiguous acreage in a grid. See subparagraph 75 A for examples.
PRF	Noncontiguous	different for part of the acreage		for each intended use, or by irrigation practice, and organic practice if offered in the actuarial documents within the acreage boundaries for the noncontiguous acreage in a grid. See subparagraph 75 B for examples.

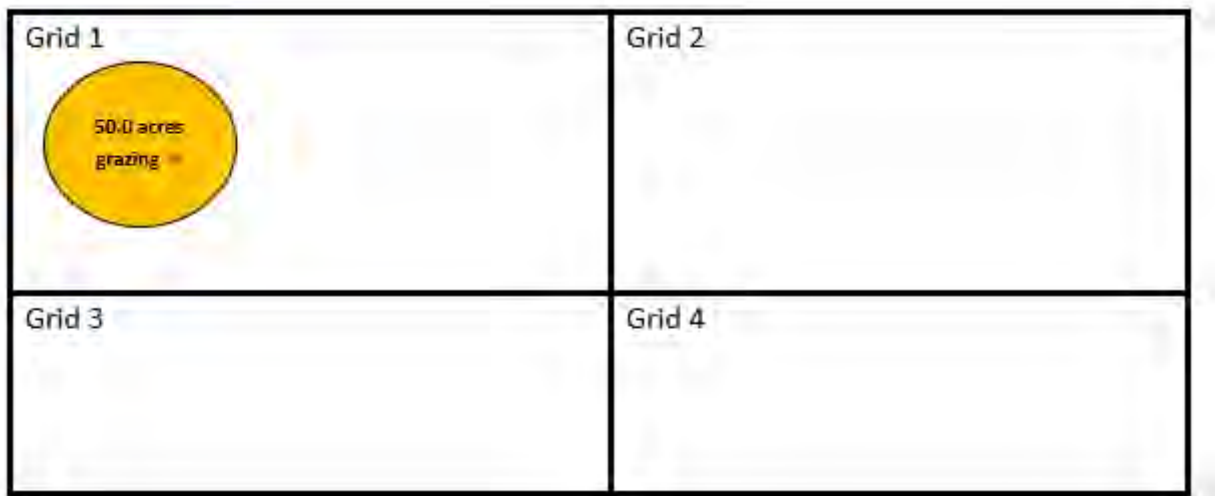
IF the crop is...	AND the acreage is...	AND the intended use and practices (where applicable) is...	AND the insured chooses to...	THEN the insured must establish a point of reference...
PRF	Contiguous	the same for all the acreage	combine the contiguous acreage into one grid	within the acreage boundaries within the grid selected by the insured. See subparagraph 76 B for examples.
PRF	Contiguous	the same for all the acreage	separate the contiguous acreage into separate grids	within the acreage boundaries within each grid selected by the insured. See subparagraph 76 B for examples.
PRF	Contiguous	different for part of the acreage	combine the contiguous acreage into one grid	for each intended use, or by irrigation practice, and organic practice if offered in the actuarial documents within the acreage boundaries within the grid selected by the insured. See subparagraph 76 C for examples.
PRF	Contiguous	different for part of the acreage	separate the contiguous acreage into separate grids	for each intended use, or by irrigation practice, and organic practice if offered in the actuarial documents within the acreage boundaries within each grid selected by the insured. See subparagraph 76 C for examples.

IF the crop is...	AND the acreage is...	AND the intended use and practices (where applicable) is...	AND the insured chooses to...	THEN the insured must establish a point of reference...
Apiculture and AF	Noncontiguous			within the acreage boundaries for each of the noncontiguous acreage in a grid. See subparagraph 75 C.
Apiculture and AF	Contiguous		combine the contiguous acreage into one grid	within the acreage boundaries within the grid selected by the insured. See subparagraph 76 D.
Apiculture and AF	Contiguous		separate the contiguous acreage into separate grids	within the acreage boundaries within each grid selected by the insured. See subparagraph 76 D.

A. Pasture, Rangeland, Forage with the Same Intended Use, Irrigation Practice, and Organic Practice

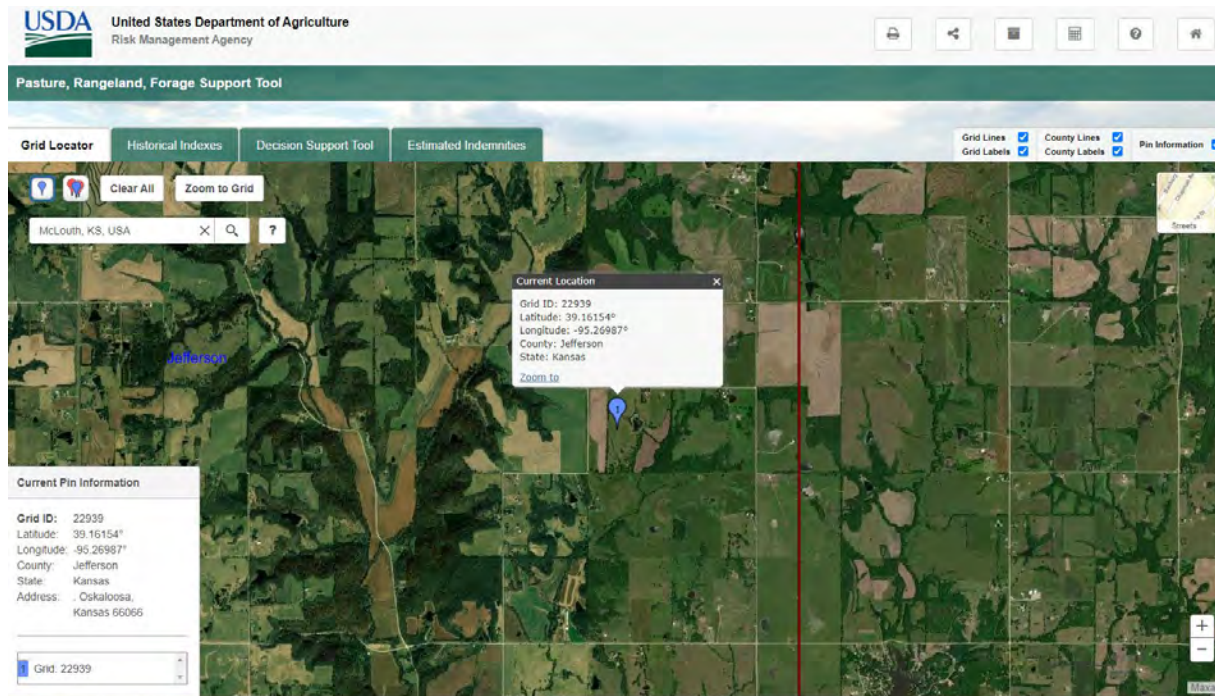
For noncontiguous acreage in a grid, the insured must establish a point of reference, by intended use, irrigation practice, and organic practice; where applicable, within the acreage boundaries.

The following is an example of noncontiguous acreage with all acreage having the same intended use and irrigation practice. Only one point of reference is required because it is noncontiguous acreage with the same intended use and irrigation practice. The red “+” represents the point of reference.



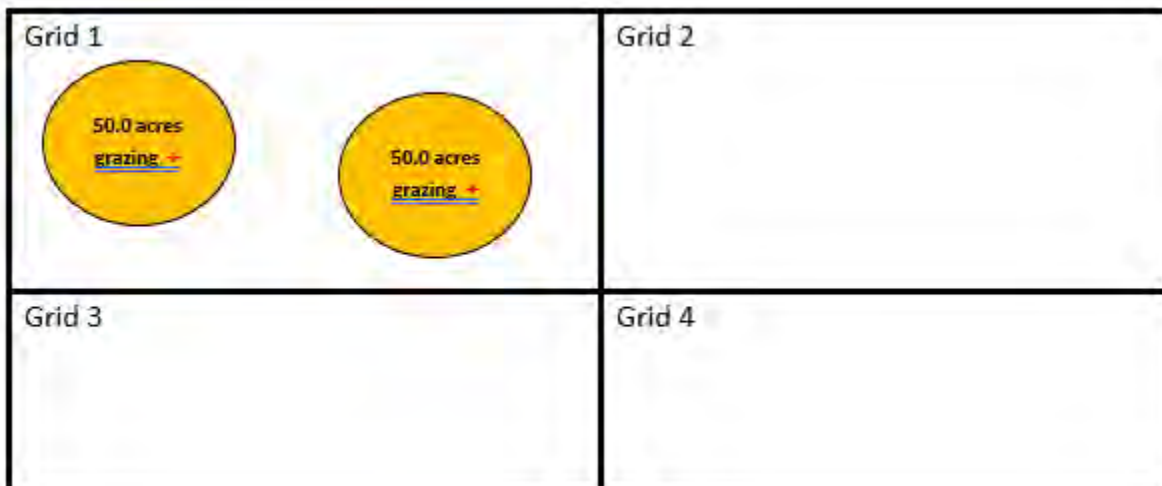
A. Pasture, Rangeland, Forage with the Same Intended Use (continued)

The following is an example of the Grid Locator page with a point of reference established for noncontiguous acreage. Only one point of reference is required because it is noncontiguous acreage with the same intended use and irrigation practice for all the acreage.



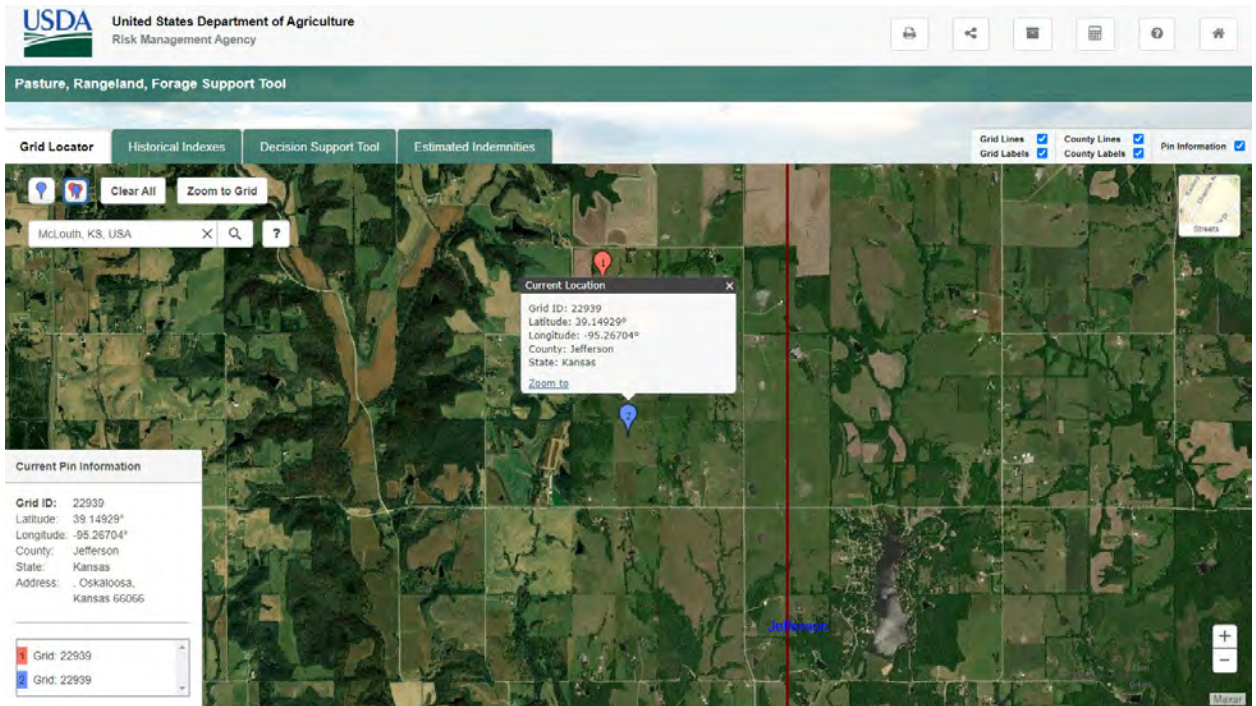
Click the icon with the three point of reference symbols located in the upper left-hand corner of the map to establish multiple points of reference on the map. The border of the icon will be blue when selected. Each point of reference will remain displayed on the map.

The following is an example of two separate noncontiguous fields with all acreage in both fields having the same intended use and irrigation practice. A point of reference must be established for each field because they are noncontiguous fields. The red “+” represents the point of reference.

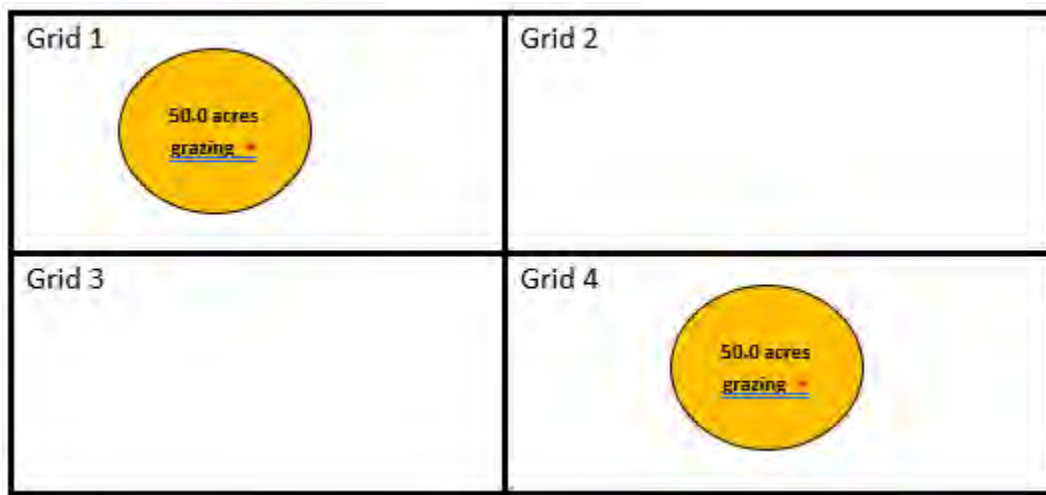


A. Pasture, Rangeland, Forage with the Same Intended Use (continued)

The following is an example of the Grid Locator page with two points of reference established. There are two separate noncontiguous fields in the same grid with all acreage in both fields having the same intended use and irrigation practice. A point of reference must be established for each field because they are separate noncontiguous fields.

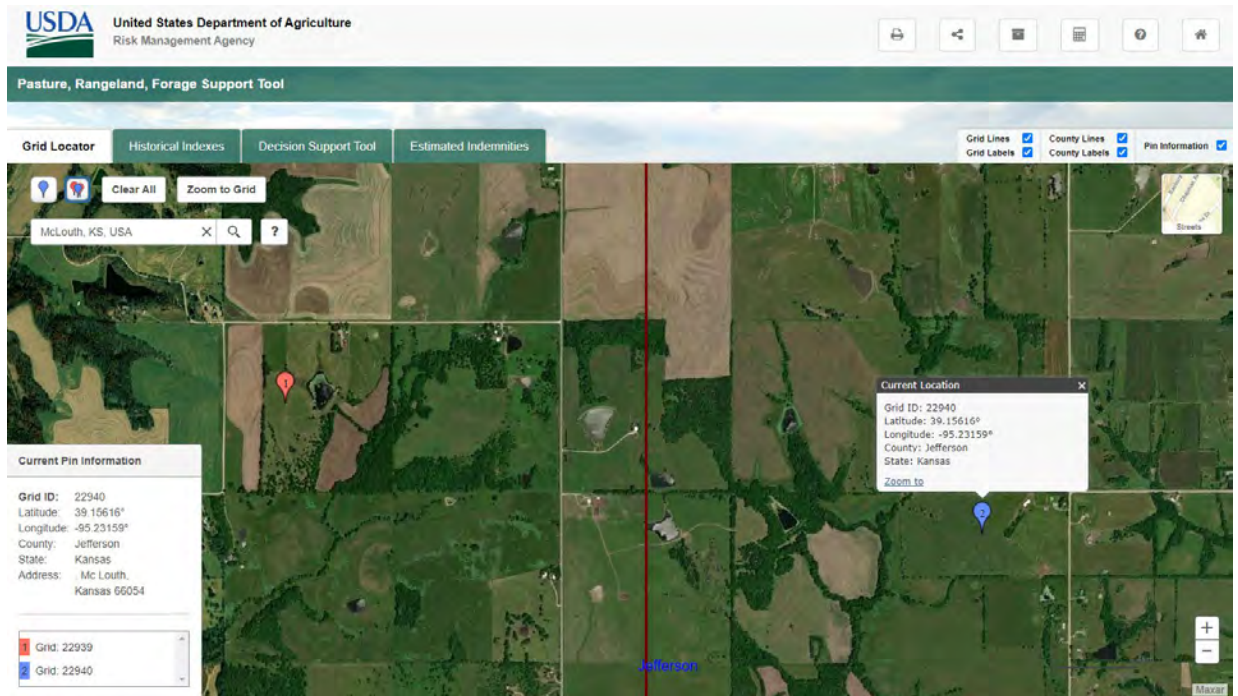


The following is an example of two noncontiguous fields located in separate grids. All acreage in both fields has the same intended use and irrigation practice. A point of reference must be established for each field because they are noncontiguous fields located in separate grids. The red “+” represents the point of reference.



A. Pasture, Rangeland, Forage with the Same Intended Use (continued)

The following is an example of the Grid Locator page with two points of reference established. There is one noncontiguous field in grid ID 22939 and another noncontiguous field in grid ID 22940. A point of reference must be established for each field because they are separate noncontiguous fields located in separate grids.

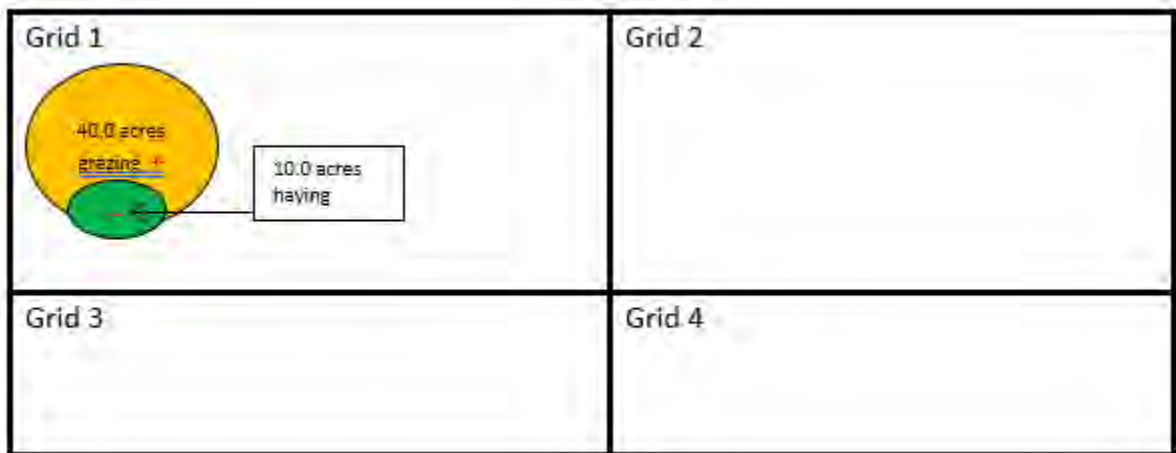


B. Pasture, Rangeland, Forage with the More Than One Intended Use, or Irrigation Practice, or Organic Practice

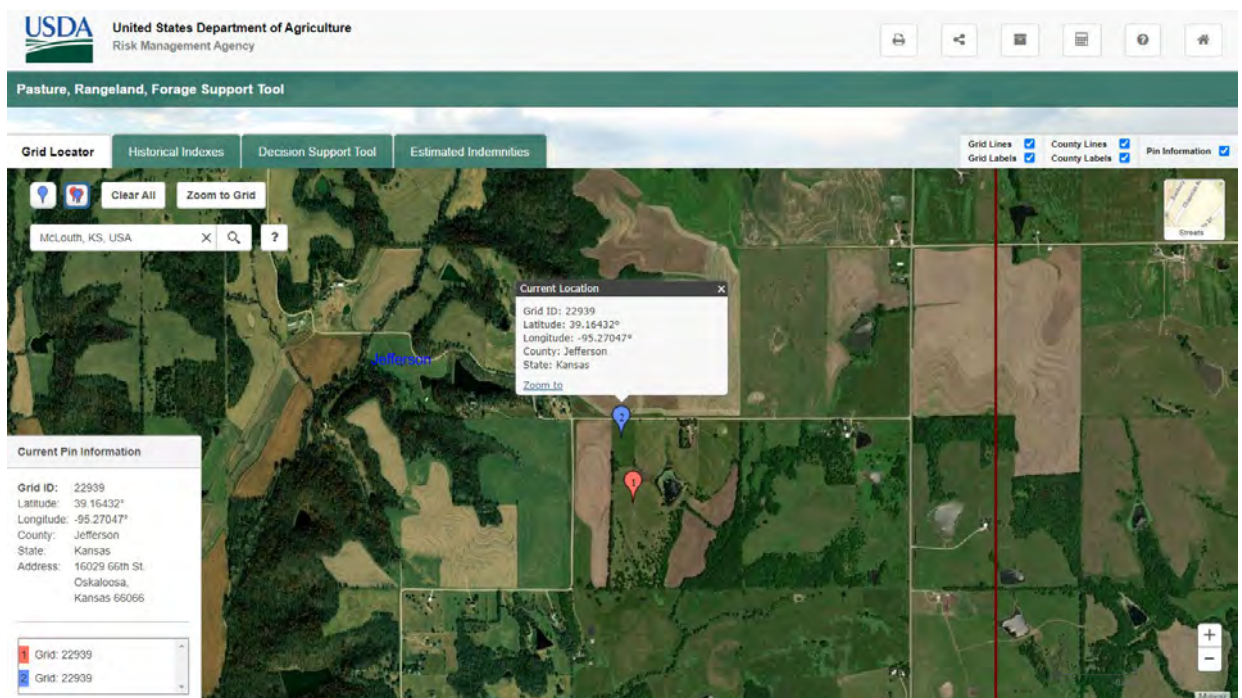
For noncontiguous acreage in a grid, the insured must establish a point of reference, by intended use, irrigation practice, and organic practice; where applicable, within the acreage boundaries.

B. Pasture, Rangeland, Forage with the More Than One Intended Use (Continued)

The following is an example of noncontiguous acreage located in one field with some of the acreage having an intended use of grazing and the remaining acreage having an intended use of haying. Two points of reference are required, one for the acres intended for grazing and one for the acres intended for haying. The red “+” represents the point of reference.



The following is an example of the Grid Locator page with two points of reference established. Some of the acres within the noncontiguous field have an intended use of grazing and the remaining acres have an intended use of haying or the acres within the one noncontiguous field are irrigated and the acres within the second noncontiguous field are non-irrigated. A separate point of reference must be established for each intended use, irrigation practice, and organic practice where applicable.



75 Noncontiguous Acreage - Point of Reference (Continued)

C. Apiculture

Intended use is not applicable under the apiculture program. Therefore, under the apiculture program, a point of reference is established for noncontiguous acreage in the same manner as under the PRF program when all acreage has the same intended use and irrigation practice.

See subparagraph A for examples of establishing a point of reference for noncontiguous acreage when all acreage has the same intended use.

76 Contiguous Acreage – Point of Reference

A. Pasture, Rangeland, Forage with the Same or More Than One Intended Use

For contiguous acreage in a grid, the insured must establish a point of reference, by intended use, irrigation practice, and organic practice (where applicable), within the acreage boundaries within the grid selected by the insured. Because contiguous acreage is located in more than one grid or county the insured must choose whether to:

- (1) combine the contiguous acreage and assign it all to one grid; or
- (2) separate the contiguous acreage and assign portions into separate grids.

If the insured chooses to separate the contiguous acreage into separate grids, the insured may assign any number of the contiguous acres to each applicable grid by intended use and irrigation practice when applicable. However, the sum of the acres assigned to all grids cannot exceed the total number of contiguous acres.

Important: Contiguous acreage that continues into an adjoining state must be insured in the state where majority of the insured acres are located, or they can be separated and insured in their respective state.

Example: Part of insured A's 50.0 contiguous acre field is physically located in grid ID 1 and part is physically located in grid ID 2. Insured A can:

- (1) combine the acres and assign all 50.0 to grid ID 1;
- (2) combine the acres and assign all 50.0 acres to grid ID 2; or
- (3) separate the acres and assign any number of acres less than 50.0 to grid ID 1 and assign the remaining acres to grid ID 2.

The sum of the number of acres assigned to grid ID 1 and grid ID 2 cannot exceed 50.0 acres.

A. Pasture, Rangeland, Forage with the Same or More Than One Intended Use (Continued)

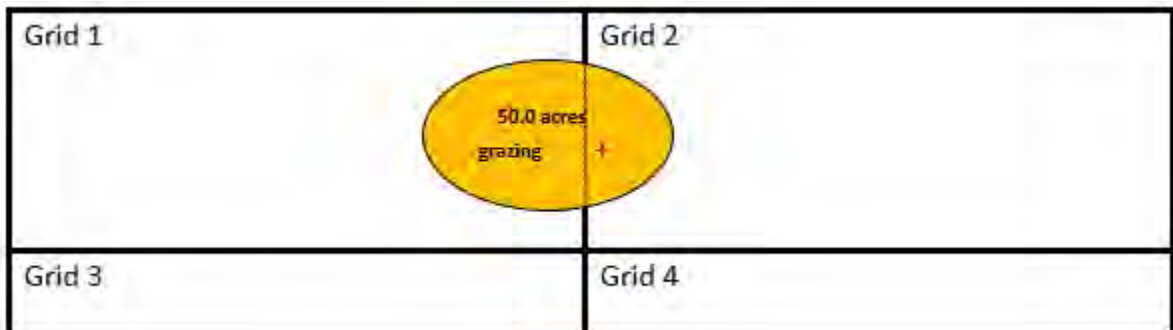
IF...	THEN...
all contiguous acreage is combined and assigned to one grid ID	one point of reference must be established, by intended use, irrigation practice, and organic practice; when applicable, within the boundaries of the contiguous acreage within the grid selected.
the contiguous acreage is separated into more than one grid	a separate point of reference must be established, by intended use, irrigation practice, and organic practice; when applicable, within the boundaries for the contiguous acreage within each grid selected.

B. Pasture, Rangeland, Forage with the Same Intended Use

The following is an example of contiguous acreage where the insured chose to combine all the acreage and assign it to grid ID 1. All the acreage has the same intended use and irrigation practice. The insured must establish one point of reference within the field boundaries within grid ID 1. The red “+” represents the point of reference.

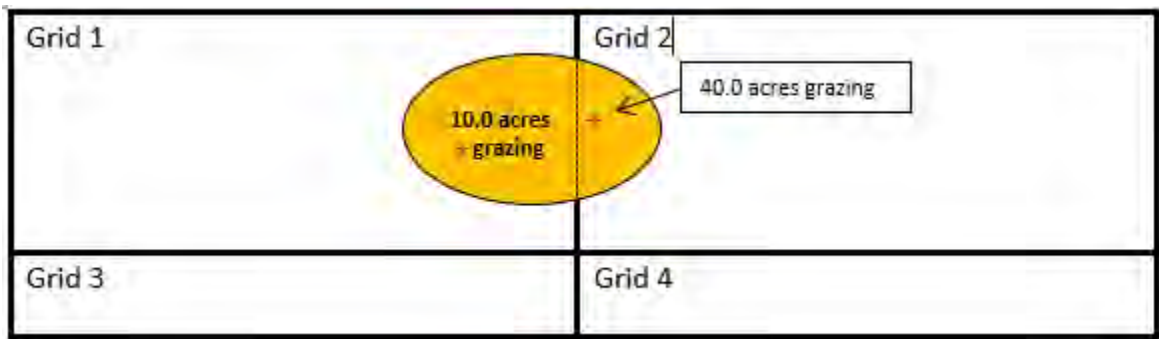


The following is an example of contiguous acreage where the insured chose to combine all the acreage and assign it to grid ID 2. All the acreage has the same intended use and irrigation practice. The insured must establish one point of reference within the field boundaries within grid ID 2. The red “+” represents the point of reference.



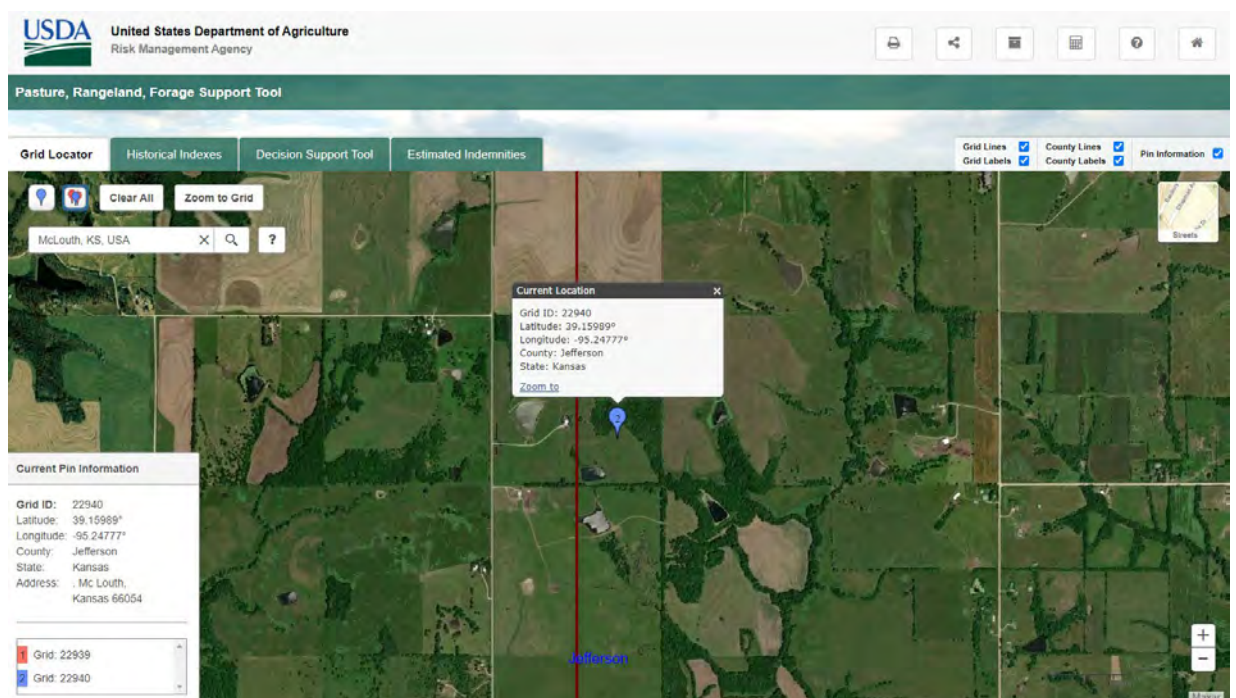
B. Pasture, Rangeland, Forage with the Same Intended Use (Continued)

The following is an example of contiguous acreage where the insured chose to separate the acreage and assign 10.0 acres to grid ID 1 and assign 40.0 acres to grid ID 2. All the acreage has the same intended use and irrigation practice. The insured must establish two points of reference, one within the field boundaries within grid ID 1 and one within the field boundaries within grid ID 2. The insured could have assigned any number of the contiguous acres to either grid ID regardless of the number of acres physically located in each grid. However, the sum of the number of acres assigned to grid ID 1 and grid ID 2 cannot exceed 50.0 acres. The red “+” represents the point of reference.



The following is an example of the Grid Locator page with one point of reference established for 70.0 contiguous acreage physically located in two grids. The insured chose to combine the acreage and assign all 70.0 acres to grid ID 22940. All the acreage has the same intended use and irrigation practice. The insured must establish one point of reference within the field boundaries within grid ID 22940.

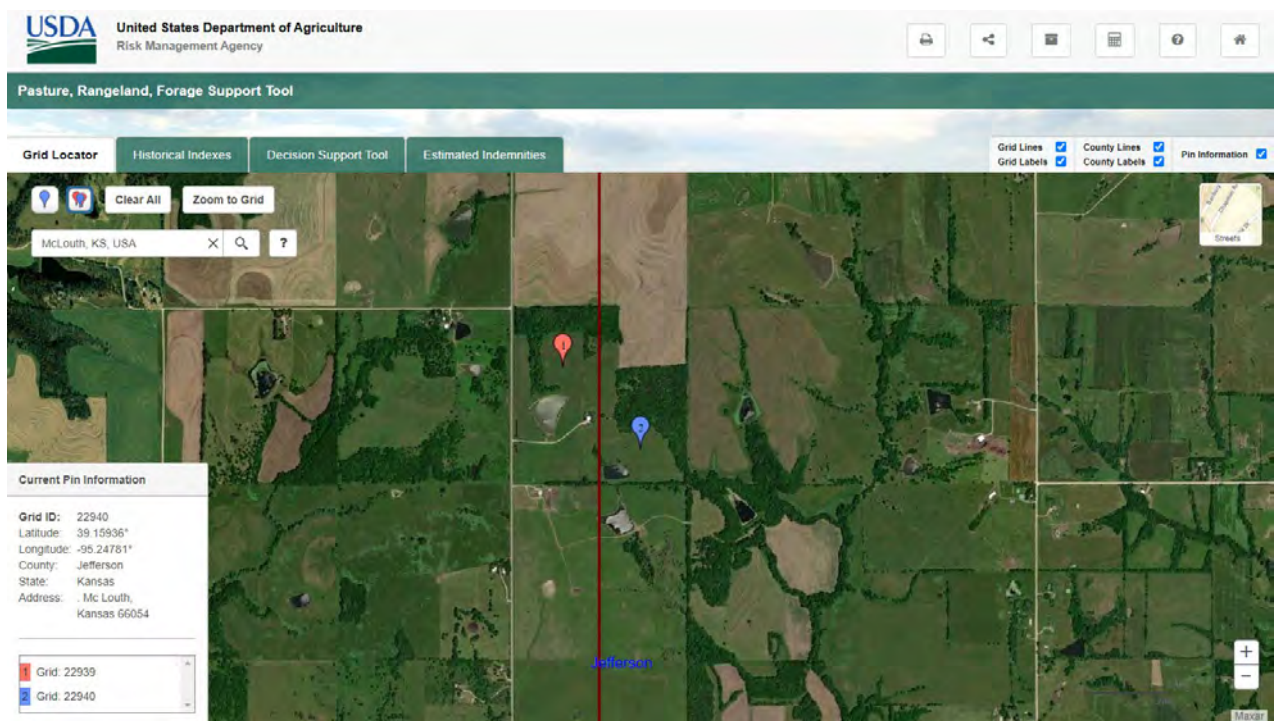
If the insured had chosen to combine the acreage and assign all 70.0 acres to grid ID 22939, the one point of reference would have to be within the field boundaries within grid ID 22939.



B. Pasture, Rangeland, Forage with the Same Intended Use (Continued)

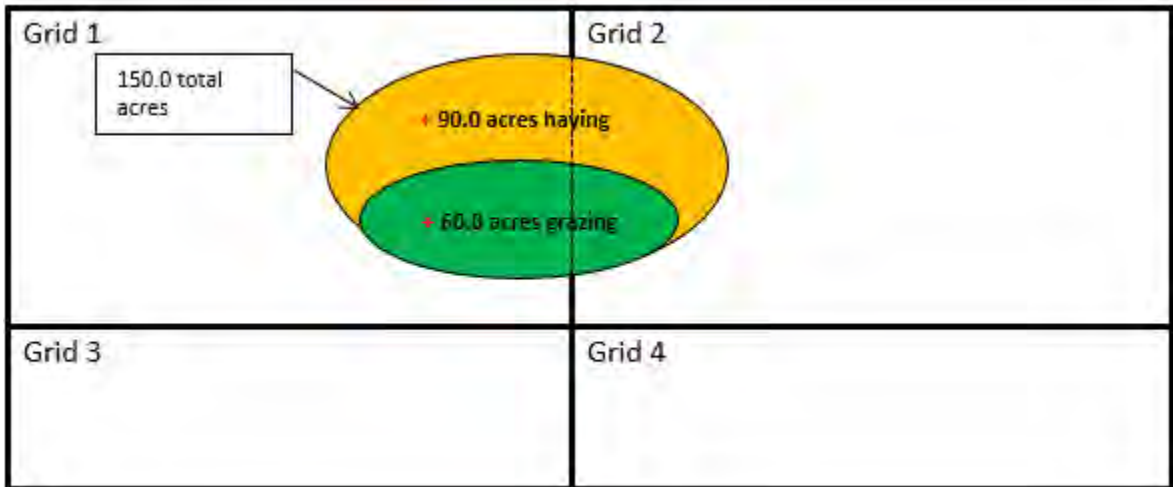
The following is an example of the Grid Locator page with two points of reference established for 70.0 contiguous acreage physically located in two grids. All the acreage has the same intended use and irrigation practice. The insured chose to separate the acreage and assign some of 70.0 acres to grid ID 22939 and some to grid ID 22940. The insured must establish two points of reference, one within the field boundaries within grid ID 22939 and one within the field boundaries within grid ID 22940.

The insured can assign any number of the contiguous acres less than 70.0 to one grid ID and the remaining acres to the other grid ID regardless of the number of the contiguous acres physically located in each grid. However, the sum of the number of acres assigned to grid ID 22939 and grid ID 22940 cannot exceed 70.0 acres.



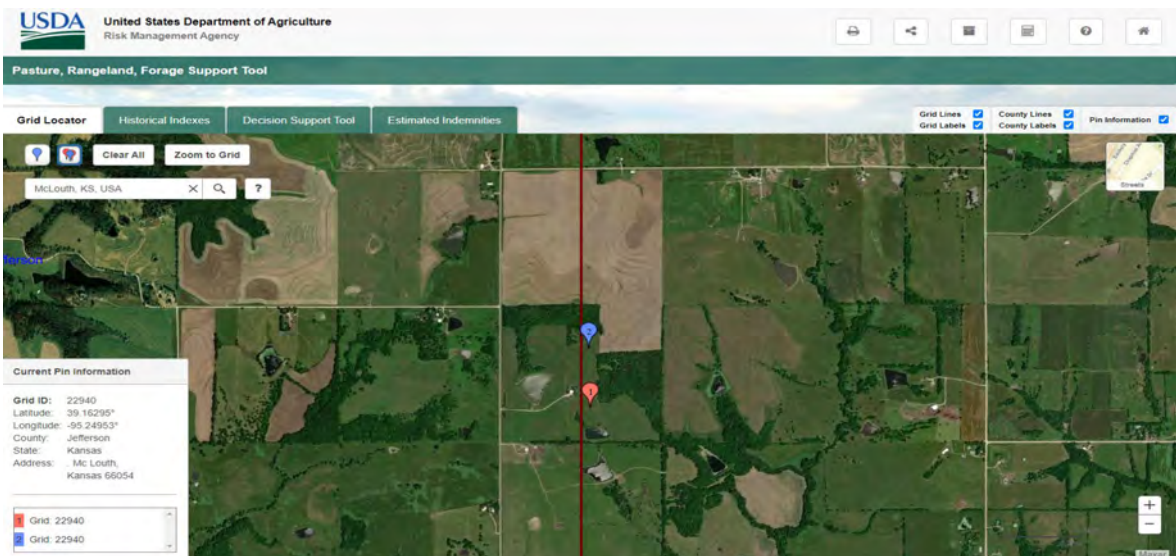
C. Pasture, Rangeland, Forage with the More Than One Intended Use

The following is an example of contiguous acreage located in one field with some of the acreage having an intended use of grazing and the remaining acreage having an intended use of haying. The insured chose to combine all 90.0 acres with an intended use of haying and assign it to grid ID 1, and combine all 60.0 acres with an intended use of grazing and assign it to grid ID 1. Two points of reference are required, one for the acres intended for grazing and one for the acres intended for haying. The red “+” represents the point of reference.



The following is an example of the Grid Locator page with two points of reference established for contiguous acreage physically located in two grids. Some of the acreage has an intended use of grazing and the remaining acreage has an intended use of haying.

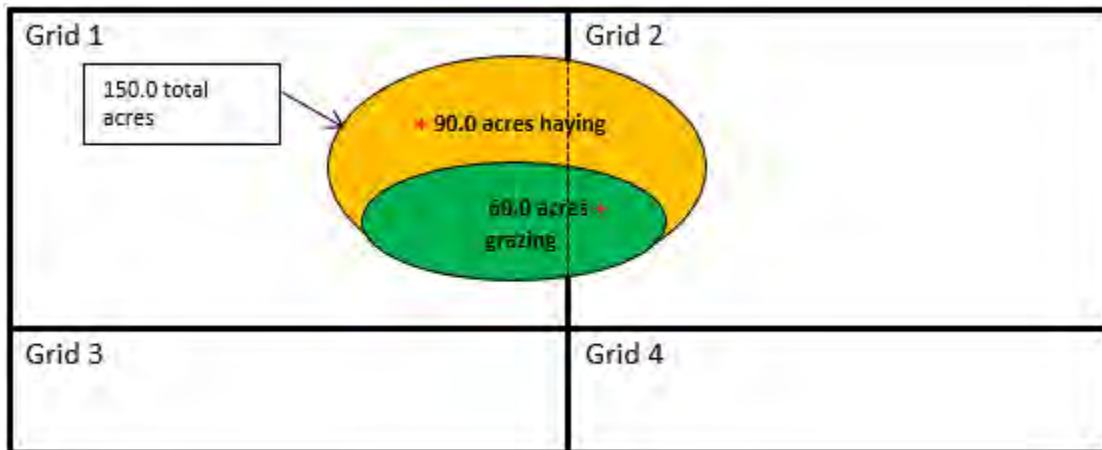
The insured chose to combine all acres with an intended use of haying and assign it to grid ID 22940, and combine all acres with an intended use of grazing and assign it to grid ID 22940. Two points of reference are required, one for the acres intended for grazing and one for the acres intended for haying.



C. Pasture, Rangeland, Forage with the More Than One Intended Use (Continued)

The following is an example of contiguous acreage located in one field with some of the acreage having an intended use of grazing and the remaining acreage having an intended use of haying.

The insured chose to combine all 90.0 acres with an intended use of haying and assign it to grid ID 1, and combine all 60.0 acres with an intended use of grazing and assign it to grid ID 2. Two points of reference are required, one in grid ID 1 for the acres intended for haying and one in grid ID 2 for the acres intended for grazing. The red “+” represents the point of reference.



The following is an example of contiguous acreage located in one field with some of the acreage having an intended use of grazing and the remaining acreage having an intended use of haying. The insured chose to separate the acreage intended for haying and assign 20.0 acres to grid ID 1 and assign 70.0 acres to grid ID 2. The insured chose to combine all 60.0 acres with an intended use of grazing and assign it to grid ID 2.

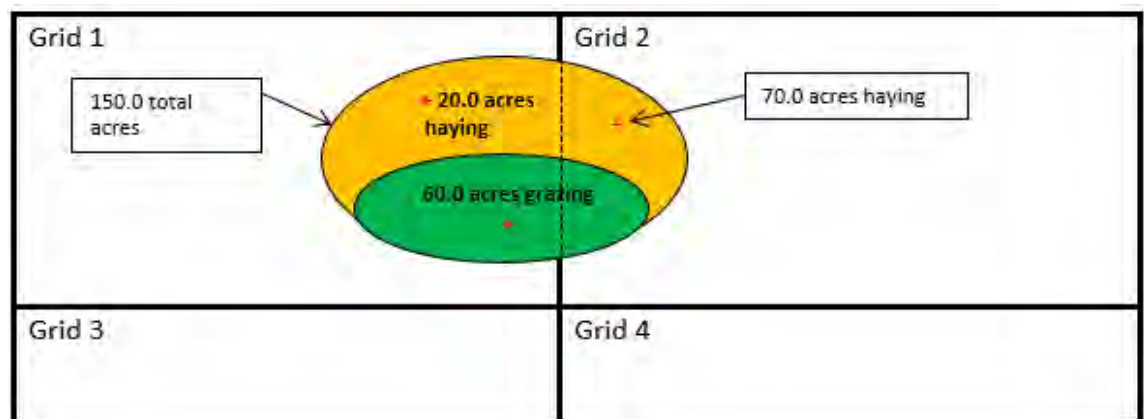
The insured must establish three points of reference, one within the field boundaries within grid ID 1 for the acreage intended for haying, one within the field boundaries within grid ID 2 for the acreage intended for haying, and one within the field boundaries within grid ID 2 for the acreage intended for grazing. The red “+” represents the point of reference.

The insured could have assigned any number of the contiguous acres intended for haying to either grid ID regardless of the number of acres physically located in each grid. The insured could have also assigned any number of the contiguous acres intended for grazing to either grid ID regardless of the number of acres physically located in each grid.

C. Pasture, Rangeland, Forage with the More Than One Intended Use (Continued)

However, the sum of the:

- (1) number of acres intended for haying assigned to grid ID 1 and grid ID 2 cannot exceed 90.0 acres;
- (2) number of acres intended for grazing assigned to grid ID 1 and grid ID 2 cannot exceed 60.0 acres; and
- (3) all acres assigned to grid ID 1 and grid ID 2 cannot exceed 150.0 acres.



The following is an example of the Grid Locator page with four points of reference established for contiguous acreage physically located in two grids. Some of the acreage has an intended use of grazing and the remaining acreage has an intended use of haying.

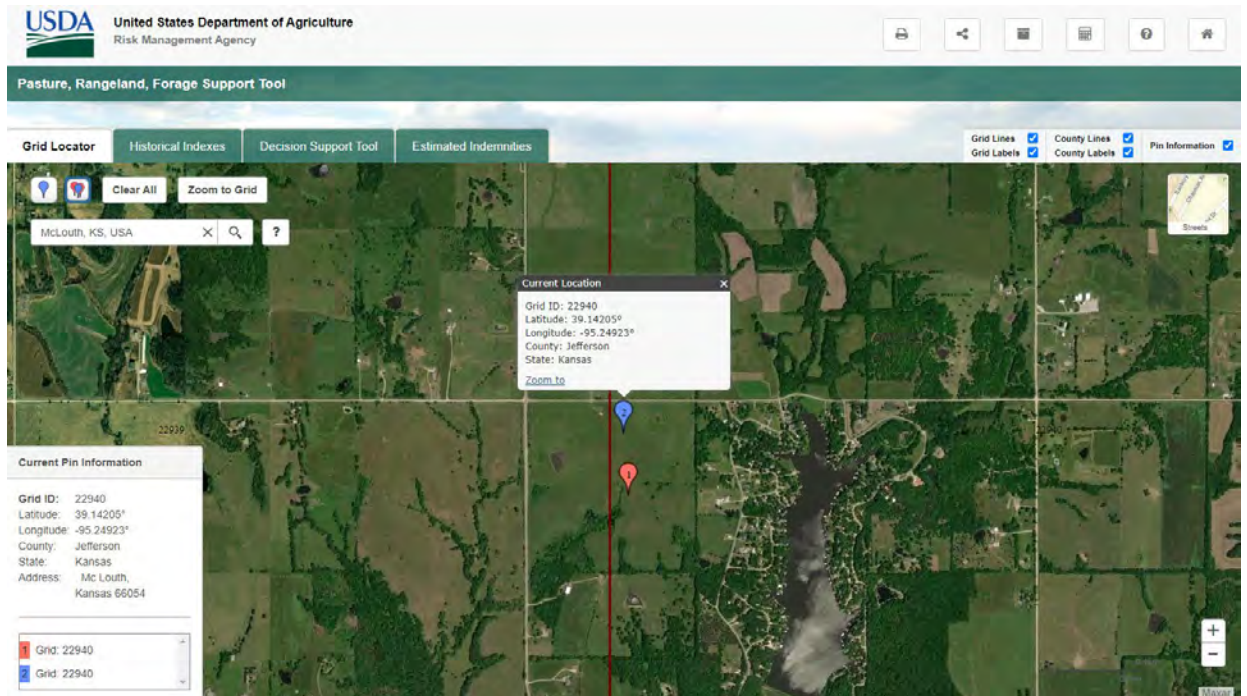
The insured chose to separate the acreage intended for haying and assign some acres to grid ID 22939 and assign the remaining acres intended for haying to grid ID 22940. The insured also chose to separate the acreage intended for grazing and assign some acres to grid ID 22939 and assign the remaining acres intended for grazing to grid ID 22940.

The insured must establish the following four points of reference.

- (1) One point of reference within the field boundaries within grid ID 22939 for the acreage intended for haying assigned to that grid ID.
- (2) One point of reference within the field boundaries within grid ID 22940 for the acreage intended for haying assigned to that grid ID.
- (3) One point of reference within the field boundaries within grid ID 22939 for the acreage intended for grazing assigned to that grid ID.
- (4) One point of reference within the field boundaries within grid ID 22940 for the acreage intended for grazing assigned to that grid ID.

C. Pasture, Rangeland, Forage with the More Than One Intended Use (Continued)

The insured could have assigned any number of the contiguous acres intended for haying to either grid ID regardless of the number of acres physically located in each grid. The insured could have also assigned any number of the contiguous acres intended for grazing to either grid ID regardless of the number of acres physically located in each grid.



NOTE: The above examples can be used to illustrate the point of reference requirements for irrigated and non-irrigated haying where those practices are separated. Where the example shows intended use, substitute irrigated and non-irrigated practice or organic practice if applicable.

D. Apiculture and Annual Forage

Intended use and irrigation practice is not applicable under the AF or apiculture programs. Therefore, under the AF or apiculture program, points of reference are established for contiguous acreage in the same manner as under the PRF program when all acreage has the same intended use.

See subparagraph B for examples of establishing a point of reference for noncontiguous acreage when all acreage has the same intended use.

EXHIBITS

Exhibit 1 Acronyms and Abbreviations

Approved Acronym/Abbreviation	Term
AIP	Approved Insurance Provider
AF	Annual Forage
CLU	Common Land Unit
CPC	Climate Prediction Center
DSSH	Document and Supplemental Standards Handbook
FCIC	Federal Crop Insurance Corporation
Grid ID	Grid Identification Number
GSH	General Standards Handbook
NOAA	National Oceanic and Atmospheric Administration
PASD	RMA, PM, Product Administration and Standards Division
PRF	Pasture, Rangeland, and Forage
RMA	USDA Risk Management Agency
RLU	Resource Land Unit
SRA	Standard Reinsurance Agreement
U.S.	United States
USDA	United States Department of Agriculture

Common Land Unit (CLU): The smallest unit of land that has a permanent, contiguous boundary, common land cover and land management, common owner, and common producer association. This information is used by RMA as an electronic representation of the FSA Field.

Contiguous:

(1) for PRF, acreage in a county or grid that continues into an adjoining state, county or grid without interruption. Acreage separated by only a public or private right-of-way, waterway, or an irrigation canal will be considered contiguous.

(2) for apiculture, acreage which contains locations owned or controlled by the insured, or rented by the insured for cash or crop share, in a county or grid that continues into an adjoining county or grid without interruption and is occupied and foraged by insurable colonies. Acreage separated by only a public or private right-of-way, waterway, or an irrigation canal will be considered contiguous.

Expected grid index: A grid index determined by FCIC based on the mean accumulated precipitation by index interval, calculated by using NOAA's interpolated historical gridded precipitation data, or successor data, based on a 24-hour period determined by the data, normalized and expressed as a percentage such that the mean is 100. The data used to calculate the expected grid index is conclusively presumed to be accurate but may be changed in accordance with section 8(e).

Final grid index: A grid index determined by FCIC based on NOAA's interpolated gridded precipitation data or successor data, based on a 24-hour period determined by the data, for each grid ID and index interval, expressed as a percentage. The data used to calculate the final grid index is conclusively presumed to be accurate unless notified by NOAA CPC in writing that there is an issue with the data and the revised data is provided.

Grid: An area identified by longitude and latitude used to determine the expected grid index, final grid index, premium and indemnity. The grid is a 0.25 degree gridded area, or successor area, established by NOAA CPC.

Grid identification number (grid ID): A specific number assigned to each grid.

Lease Certification Form: A self-certified form used by you to certify a lease agreement.

Point of reference: The location provided by the insured of the insured acreage. The point of reference must be provided using the maps contained on RMA's website or an AIP's mapping software.

RMA's website: A website hosted by RMA and located at www.rma.usda.gov or a successor website.

Resource Land Unit (RLU): Generic geospatial data standard, established between AIPs and RMA, used to meet geospatial reporting requirements per Appendix III of the Standard Reinsurance Agreement.

Trigger grid index: The result of multiplying the expected grid index by the coverage level selected by you.

Verifiable Records: Contemporaneous records provided by the insured which may be verified through an independent source and which substantiate the information reported including the number of colonies insured and your ability or right to occupy or place/locate colonies on specific property within a grid ID during the crop year.

Exhibit 3 Lease Certification Form

If an AIP chooses to develop a lease certification form for use by their insureds, such forms should comply with the “Substantive” standards listed below and the applicable state laws that govern lease agreements. This certification form can be used for all Rainfall products. All items within quotation marks in the subparagraphs below are substantive unless otherwise noted.

A. General Information

- (1) “State”
- (2) “County”
- (3) “Policy Number”

B. Lease Certification

- (1) “Operator/Tenant (Lessee)”
- (2) “Landowner/Landlord (Lessor)”
- (3) “Address(es), FSA Farm Number(s), Legal Description, or Latitude and Longitude”
- (4) “Number of Acres Leased”
- (5) “Lease Commenced on”
- (6) “Lease Expires on”
- (7) “Terms of the Lease Agreement (Select one of the following for applicable program)
 - (a) For PRF/AF:
 - (i) Dollar/Acre Rental Arrangement
 - (ii) Cash or Fixed Dollar Amount
 - (iii) Share Rent
 - (iv) Rate of Gain
 - (v) Cost Per Head, Per Day or Month
 - (vi) Animal Unit Month Basis
 - (vii) Other, (Specify)

B. Lease Certification (Continued)

- (b) For Apiculture:
 - (i) Dollar/Acre Rental Arrangement
 - (ii) Cash or Fixed Dollar Amount
 - (iii) Share Rent
 - (iv) Other, (Specify)''
- (8) "I certify that I entered into a lease agreement with the Lessor specified in **B(2)** beginning on the date specified in **B(5)** and ending on the date in **B(6)**. I certify that the terms of the lease agreement entered in **B(7)** are true and correct for the specified farm(s) listed in **B(3)** for the period of the lease agreement entered in **B(5) and (6)**."
- (9) "Signature of Lessee (By)"
- (10) "Title/Relationship of the Individual Signing in a Representative Capacity"
- (11) "Date (MM-DD-YYYY)"

C. Required Statements

- (1) Certification Statement is required (DSSH Para. 502)
- (2) Privacy Act Statement is required (DSSH Para. 501)
- (3) Non-Discrimination Policy Statement is required (DSSH Para. 503)

Exhibit 4 Rainfall Index Disclaimers

The following is the Rainfall Index Disclaimer form that must be signed by each insured when completing their application.

Rainfall Index Disclaimer

By signing below, I certify that I understand the following.

1. The Rainfall Index plan of insurance is not a plan of insurance against a loss of actual production. The terms and conditions of the Rainfall Index are different from those of an Actual Production History plan of insurance. The Rainfall Index plan of insurance does not measure, capture, or utilize the actual crop production of any producer or any of the actual crop production within the grid, county or state. It is based upon grid indices, not individual farm yields.
2. Selecting index intervals when precipitation is not needed for the insured crop or when precipitation does not normally occur is not an effective use of the Rainfall Index plan of insurance.
3. The Rainfall Index is a risk management tool to insure against a decline in an index value that is based on the long-term historical average precipitation for the grid and index interval. It is best suited for producers whose production tends to follow and correlate to the historical average interpolated precipitation patterns for the grid.
4. It is possible for me to have low crop production or receive low precipitation amounts on the acreage I insure and still not receive an indemnity payment under this plan.
5. The only insurable cause of loss is having a final grid index less than my trigger grid index.
6. There are historical indices, information, and other tools on the RMA website to help me determine if the Rainfall Index is suitable for my risk management needs.

Insured's signature: _____ Date: _____

A. Overview

This exhibit provides an example of a producer who has elected to insure PRF acreage under the Rainfall Index plan of insurance. It also provides an illustration of how indemnities would be calculated.

The same basic information is applicable to the apiculture program. However, there are some differences between the Rainfall Index and the apiculture, AF, and PRF programs. Some of the differences include, but are not limited to, the number of index intervals required to be insured, limitations on the maximum percent of value that may be selected in an index interval, growing seasons, the applicability of different intended uses, and the payment calculation factor.

See the Rainfall Index Plan Common Policy, AF Crop Provisions, Apiculture Crop Provisions and actuarial documents for more information about each plan and crop policy.

The following information is applicable to this example.

- (1) The county base value per acre for an intended use of grazing is \$20.00.
- (2) The expected grid index is 100 for each grid ID, intended use, and index interval.
- (3) The premium rate for 90 percent coverage level for an intended use of grazing is:
 - (a) 0.1000 in the April - May index interval; and
 - (b) 0.1100 in the July - August index interval.
- (4) The premium subsidy factor for 90 percent coverage level is 51 percent.
- (5) Some of the calculations in the example are rounded to the nearest whole dollar.

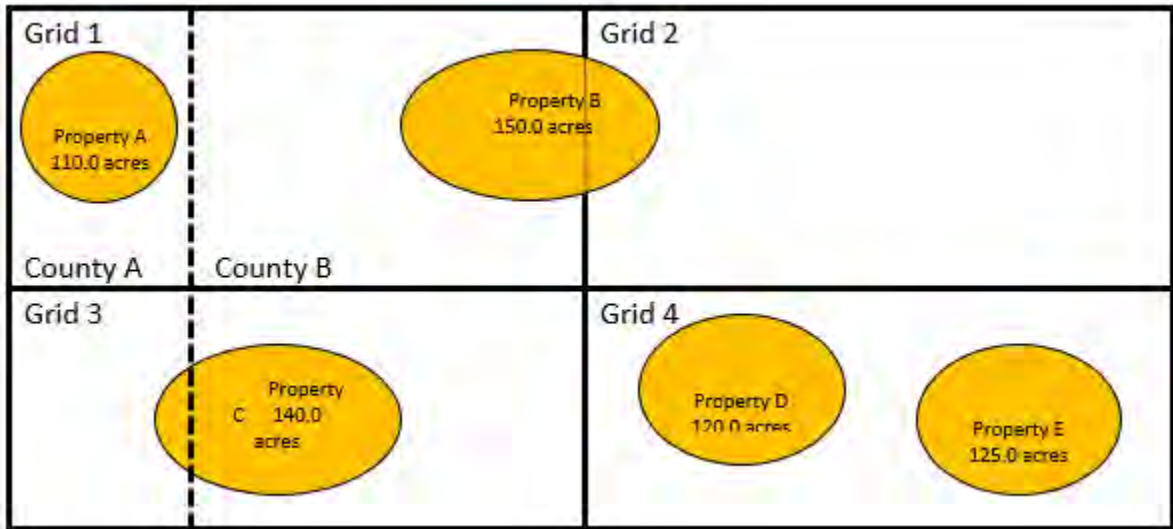
B. Producer A's Acreage Information

Producer A has five properties with a total of 645.0 acres in two counties. The acreage is spread out over four separate grids. Producer A has 100 percent share in all the acreage.

Using RMA's website and grid locator, producer A locates the five properties and corresponding grids. See [part 4](#) for more information about identifying acreage and grid IDs.

B. Producer A's Acreage Information (Continued)

The following illustrates the location of the five properties.



C. Points of Reference

The location and number of points of reference required are determined by Producer A's choices.

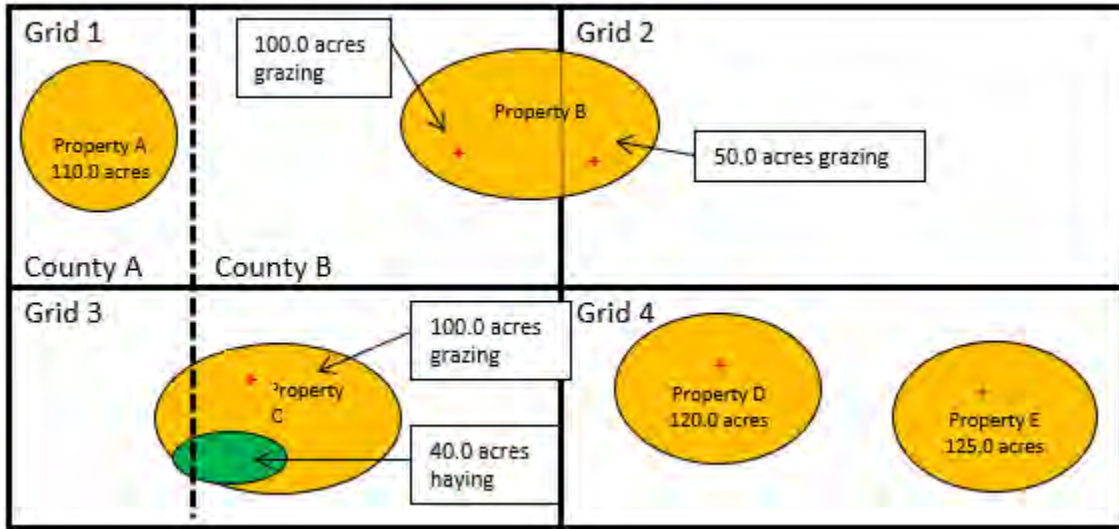
Producer A makes the following choices regarding the five properties.

- (1) Not to insure property A.
- (2) Insure all 150.0 acres in property B with an intended use of grazing, but separate the contiguous acreage and assign 100.0 acres to grid ID 1 and 50.0 acres to grid ID 2.
- (3) Not insure 40.0 acres in property C with an intended use of haying.
- (4) Insure 100.0 acres in property C with an intended use of grazing and combine the contiguous acreage into County B.
- (5) Insure all 120.0 acres in property D with an intended use of grazing.
- (6) Insure all 125.0 acres in property E with an intended use of grazing.

Based on Producer A's choices, five separate points of reference must be established by Producer A. The following illustrates the location of the five properties with the points of reference selected by Producer A. The red "+" represents the point of reference.

C. Points of Reference (Continued)

There is no point of reference for property A or the 40 acres in property C intended for haying because Producer A chose not to insure any acreage property A and not insure the acreage intended for haying in property C.



D. Insurance Choices

For all the acreage to be insured, Producer A selects:

- (1) a 90 percent coverage level for all acreage to be insured;
- (2) a 120 percent productivity factor;
- (3) index interval 628 (April – May) and 631 (July and August);
- (4) a percent of value of 60 percent for index interval 628; and
- (5) a percent of value of 40 percent for index interval 631.

Exhibit 5 Rainfall Index - Pasture, Rangeland, Forage Example (Continued)

E. Protection and Premium

The following are based on Producer A’s acreage, intended uses, and insurance choices.

The dollar amount of protection per acre is \$21.60. Dollar amount of protection per acre equals county base value per acre multiplied by the coverage level selected multiplied by the productivity factor selected ($\$20.00 \times .90 \times 1.20$).

The total policy protection is \$10,692. The total policy protection is the sum of the policy protection for each unit. The following table provides the policy protection for each unit.

Grid ID	Index Interval	Unit	Policy Protection Per Unit
1	628	xxxxx	\$1,296.00 ($\$21.60 \times 100.0 \text{ acres} \times 60 \text{ percent of value} \times 1.00 \text{ share}$)
	631	xxxxx	\$864.00 ($\$21.60 \times 100.0 \text{ acres} \times 40 \text{ percent of value} \times 1.00 \text{ share}$)
2	628	xxxxx	\$648.00 ($\$21.60 \times 50.0 \text{ acres} \times 60 \text{ percent of value} \times 1.00 \text{ share}$)
	631	xxxxx	\$432.00 ($\$21.60 \times 50.0 \text{ acres} \times 40 \text{ percent of value} \times 1.00 \text{ share}$)
3	628	xxxxx	\$1,296.00 ($\$21.60 \times 100.0 \text{ acres} \times 60 \text{ percent of value} \times 1.00 \text{ share}$)
	631	xxxxx	\$864.00 ($\$21.60 \times 100.0 \text{ acres} \times 40 \text{ percent of value} \times 1.00 \text{ share}$)
4	628	xxxxx	\$3,175.00 ($\$21.60 \times 245.0 \text{ acres} \times 60 \text{ percent of value} \times 1.00 \text{ share}$)
	631	xxxxx	\$2,117.00 ($\$21.60 \times 245.0 \text{ acres} \times 40 \text{ percent of value} \times 1.00 \text{ share}$)
	Total policy protection		\$10,692

Total premium amount due is \$1,114.00. However, FCIC pays 51 percent subsidy at the 90 percent coverage level; therefore, Producer A’s total premium amount due is \$546 ($\$1,114 - \568). The total premium amount due is the sum of the premium amount due for each unit. The premium amount per unit equals the dollar amount of protection per acre multiplied by the premium rate for the coverage level and index interval selected multiplied by the number of acres multiplied by the percent of value selected multiplied by the producer’s share.

E. Protection and Premium (Continued)

The following table provides the premium amount for each unit.

Grid ID	Index Interval	Unit	Premium Amount Due
1	628	xxxxxx	\$130.00 (\$21.60 × 0.1000 × 100.0 acres × 60 percent of value × 1.00 share)
	631	xxxxxx	\$95.00 (\$21.60 × 0.1100 × 100.0 acres × 40 percent of value × 1.00 share)
2	628	xxxxxx	\$65.00 (\$21.60 × 0.1000 × 50.0 acres × 60 percent of value × 1.00 share)
	631	xxxxxx	\$48.00 (\$21.60 × 0.1100 × 50.0 acres × 40 percent of value × 1.00 share)
3	628	xxxxxx	\$130.00 (\$21.60 × 0.1000 × 100.0 acres × 60 percent of value × 1.00 share)
	631	xxxxxx	\$95.00 (\$21.60 × 0.1100 × 100.0 acres × 40 percent of value × 1.00 share)
4	628	xxxxxx	\$318.00 (\$21.60 × 0.1000 × 245.0 acres × 60 percent of value × 1.00 share)
	631	xxxxxx	\$233.00 (\$21.60 × 0.1100 × 245.0 acres × 40 percent of value × 1.00 share)
	Total Premium Amount		\$1,114

F. Indemnity Scenarios

The indemnity for the unit will be equal to the payment calculation factor multiplied by the policy protection per unit. The indemnity payment calculation factor for the Rainfall Index plan of insurance is determined by dividing the result of the insured’s trigger grid index minus the final grid index by the insured’s trigger grid index [(insured’s trigger grid index – final grid index) ÷ insured’s trigger grid index].

F. Indemnity Scenarios (Continued)

The following scenarios provide examples of different final grid indexes and the resulting indemnities for Insured A, if any. Insured A's trigger grid index is 90 (100 expected grid index × 90 percent coverage level).

Scenarios for index interval 628:

Scenario 1: FCIC publishes a final grid index of 120 for index interval 628 for all four grids.

Result: The final grid index is above Insured A's trigger grid index. Therefore, no indemnity payment is due.

Scenario 2: For index interval 628, FCIC publishes a final grid index of 80 for grid ID 1 and grid ID 2, and a final grid index of 95 for grid ID 3 and grid ID 4.

Result: The final grid index is below Insured A's trigger grid index for grid ID 1 and grid ID 2; therefore, Insured A is eligible for an indemnity payment for those units. The payment calculation factor is 0.111 $((90 - 80)/90)$.

Insured A's indemnity amount is \$144 $(0.111 \times \$1,296)$ for the 100.0 acres in grid ID 1, and \$72 $(0.111 \times \$648)$ for the 50.0 acres in grid ID 2.

The final grid index is above Insured A's trigger grid index for grid ID 3 and grid ID 4; therefore, no indemnity is due for those units.

Scenario 3: For index interval 628, FCIC publishes a final grid index of 80 for grid ID 1 and grid ID 2, and a final grid index of 60 for grid ID 3 and grid ID 4.

Result: The final grid index is below Insured A's trigger grid index for all four grids; therefore, Insured A is eligible for an indemnity payment for units. The payment calculation factor is 0.111 $((90 - 80)/90)$ for grid ID 1 and grid ID 2. The payment calculation factor is 0.333 $((90 - 60)/90)$ for grid ID 3 and grid ID 4.

Insured A's indemnity amount is:

- (1) \$144 $(0.111 \times \$1,296)$ for the 100.0 acres in grid ID 1;
- (2) \$72 $(0.111 \times \$648)$ for the 50.0 acres in grid ID 2;
- (3) \$432 $(0.333 \times 1,296)$ for the 100.0 acres in grid ID 3; and
- (4) \$1,057 $(0.333 \times 3,175)$ for the 245.0 acres in grid ID 4.

F. Indemnity Scenarios (Continued)

Scenarios for index interval 631:

Scenario 1: For index interval 631, FCIC publishes a final grid index of 90 for grid ID 1 and grid ID 2, and a final grid index of 85 for grid ID 3 and grid ID 4.

Result: The final grid index is equal to Insured A's trigger grid index for grid ID 1 and grid ID 2; therefore, no indemnity is due for those units.

The final grid index is below Insured A's trigger grid index for grid ID 3 and grid ID 4; therefore, Insured A is eligible for an indemnity payment for those units. The payment calculation factor is 0.056 $((90 - 85)/90)$.

Insured A's indemnity amount is \$48 $(0.056 \times \$864)$ for the 100.0 acres in grid ID 3, and \$119 $(0.056 \times \$2,117)$ for the 245.0 acres in grid ID 4.

Scenario 2: For index interval 631, FCIC publishes a final grid index of 70 for grid ID 1 and grid ID 2, and a final grid index of 65 for grid ID 3 and grid ID 4.

Result: The final grid index is below Insured A's trigger grid index for all four grids; therefore, Insured A is eligible for an indemnity payment for units. The payment calculation factor is 0.222 $((90 - 70)/90)$ for grid ID 1 and grid ID 2. The payment calculation factor is 0.278 $((90 - 65)/90)$ for grid ID 3 and grid ID 4.

Insured A's indemnity amount is:

- (1) \$192 $(0.222 \times \$864)$ for the 100.0 acres in grid ID 1;
- (2) \$96 $(0.222 \times \$432)$ for the 50.0 acres in grid ID 2;
- (3) \$240 (0.278×864) for the 100.0 acres in grid ID 3; and
- (4) \$588 $(0.278 \times 2,117)$ for the 245.0 acres in grid ID 4.

Scenario 3: FCIC publishes a final grid index of 120 for index interval 631 for all four grids.

Result: The final grid index is above Insured A's trigger grid index. Therefore, no indemnity payment is due.

F. Indemnity Scenarios (Continued)

The following are the total indemnities for Insured A based on the scenarios for both index intervals.

Insured A received a total of:

\$167 [(\$0 for index interval 628) + (\$48 + \$119 for index interval 631)] in indemnities under scenario 1;

\$1,332 [(\$144 + 72 for index interval 628) + (\$192 + \$96 + \$240 + \$588 for index interval 631)] in indemnities under scenario 2; and

\$1,705 [(\$144 + \$72 + \$432 + \$1,057 for index interval 628) + (\$0 for index interval 631)] in indemnities under scenario 3.

A. Insurable Interest

Insurable interest is the insured's percentage of the insured crop that is at financial risk. When the insured crop is the PRF with an intended use of grazing, the insured's percentage of the insured crop that is at financial risk will be based on the insured's percentage:

- (1) interest in the livestock to be grazed on the insured acres, if the acres are cash leased;
or
- (2) of the value gained of the livestock being grazed on the insured acres if the acres are share leased.

Lessors under a cash lease are not considered to have a share in the insured crop.

Important: For the intended use of grazing under PRF, the insurable interest in the crop is based on the interest in the livestock and not the land. If requested, records must be provided to determine if the acreage is cash leased or share leased and that the producer has grazed livestock in past will be required. In addition, these records must be maintained for period of three years after the crop year.

B. Share and Cash Grazing Leases

A grazing lease is considered a cash lease if the lease provides for only a guaranteed sum certain cash payment, or fixed quantity of in-kind payment, such as:

- (1) a set sum of money per head or per month;
- (2) a specific quantity of in-kind payment, such as specific number of calves;
- (3) a specific amount per weight gain, such as 12 cents per pound of weight gained during the lease period; or
- (4) other forms of compensation where the lessor does not obtain a percentage interest of the value of gain of the livestock being grazed.

See subparagraph C for examples of cash grazing leases.

B. Share and Cash Grazing Leases (Continued)

A grazing lease is considered a share lease if the lessor obtains:

- (1) a percentage interest of the value of the gain of the livestock being grazed. Value of the gain includes, but is not limited to:
 - (a) offspring from the livestock being grazed;
 - (b) proceeds derived from the weight of gain of the livestock being grazed; or
 - (c) proceeds from the value of the milk produced from the livestock.
- (2) a combination of a guaranteed sum certain cash payment or fixed quantity of in-kind payment, and a percentage interest of the value of the gain of the livestock being grazed.

See subparagraph D for examples of share grazing leases.

Important: The lease certification form may be used; however, the AIP must be able to verify the information submitted on the certification form. If the AIP discovers that the lease certification form was false and no lease existed, the insured be subject to section 16(d) of the Basic Provisions no indemnities will be paid the insured will still owe premium.

C. Examples of Cash Grazing Leases

The following are examples of leases that are considered cash grazing leases. The lessee owns 100 percent of the livestock being grazed in each example.

Example 1: Lessor A leases 150.0 PRF acres for grazing to Lessee B in return for \$21.00 per acre. In this example, Lessor A has no insurable interest and is not eligible to insure the 150.0 acres under the Rainfall Index plan of insurance. Lessee B has 100 percent insurable interest in the insured PRF crop.

Example 2: Lessor C leases 200.0 PRF acres for grazing to Lessee D in return for 5 calves. Lessor C receives a specific quantity of in-kind payment, regardless of the number of calves born during the lease period from the cows grazing the leased acres. In this example, Lessor C has no insurable interest and is not eligible to insure the 200.0 acres under the Rainfall Index plan of insurance. Lessee D has 100 percent insurable interest in the insured PRF crop.

C. Examples of Cash Grazing Leases (Continued)

Example 3: Lessor E leases 250.0 PRF acres for grazing to Lessee F in return for 12 cents per pound of weight gained by the livestock grazing the leased acreage during the lease period. If the total weight gained by the livestock during the lease period is 2,000 pounds, Lessor E receives \$240.00. If the total weight gained by the livestock during the lease period is 2,500 pounds, Lessor E receives \$300.00. While the amount Lessor E receives depends on the total weight gained, the amount per pound is a specific amount per pound gained, not a percentage of the value of the weight gained.

In this example, Lessor E has no insurable interest and is not eligible to insure the 250.0 acres under the Rainfall Index plan of insurance. Lessee F has 100 percent insurable interest in the insured PRF crop.

D. Examples of Share Grazing Leases

The following are examples of leases that are considered share grazing leases. The lessee owns 100 percent of the livestock being grazed in each example.

Example 1: Lessor G leases 500.0 PRF acres for grazing to Lessee H in return for five percent of the calves born during the lease period from the cows grazing the leased acres. If 100 calves are born by the cows grazing the leased acreage during the lease period, Lessor G receives five calves. If 150 calves are born by the cows grazing the leased acreage during the lease period, Lessor G receives eight calves. In this example, Lessor G's insurable interest in the insured PRF crop is five percent and Lessee H's insurable interest is 95 percent.

Example 2: Lessor I leases 100.0 PRF acres for grazing to Lessee J in return for 25 percent of the value of the weight the livestock gained during the lease period. If the value of the total weight gained of all livestock grazing the leased acreage during the lease period is \$1,200.00, Lessor I receives \$300.00. In this example, Lessor I's insurable interest in the insured PRF crop is 25 percent and Lessee J's insurable interest is 75 percent.

Example 3: Lessor K leases 300.00 PRF acres for grazing to Lessee L in return for \$5.00 per acres plus 12 percent of the value of the weight the livestock gained during the lease period. If the value of the total weight gained of all livestock grazing the leased acreage during the lease period is \$1,200.00, Lessor K receives \$144.00. In this example, Lessor K's insurable interest in the insured PRF crop is 12 percent and Lessee L's insurable interest is 88 percent.

E. Determining Shares

An insurable share is the percentage of interest in the insured crop the owner, owner-operator, tenant has at the time insurance attaches. For the intended use of grazing for PRF, the insurable interest is based upon the percentage of interest in the livestock or percentage interest in the value gained of the livestock.

When determining shares, identify if the acres are owned or leased on a cash basis; or leased for a share of the profit in the livestock. Once that determination is made, review the lease in conjunction with the FSA-578 (Report of Acreage), or Resource Land Units to identify the location of the acreage and the quantity of acreage available to the producer for insurance (the “insurable acreage”). Documentation that supports insurable acreage can be, but are not limited to:

- (1) Grazing permit (BLM, USFS, State);
- (2) Lease Agreement;
- (3) Property Tax Records; and
- (4) Deeds.

An FSA-578 is NOT acceptable documentation by itself for determining shares. FSA programs and PRF have different rules/criteria for determining who has a share in a crop, and therefore, may not be appropriate for PRF. The FSA-578 may be used in support of or in conjunction with other documentation for determining shares but cannot be used as the only documentation for determining shares.

The following are examples of using the FSA-578 in conjunction with lease, grazing permit, or ownership records to determine insurable acreage; however, upon request livestock records may also need to be provided for the intended use of grazing:

Example 1: Lessee K leases land from the BLM. Lessee K reports the lease to FSA and obtains an FSA-578. Lessee K provides the FSA-578 and BLM master allotment report. The FSA-578 provides the location of the land and reports the producer has 100% share of 50,000 acres. The BLM master allotment report clarifies that the producer only has access to 100 animal unit month (AUM) within the allotment along with four other producers. The total AUMs permitted on the BLM allotment is 400. In this case the producer has 25% share in 50,000 acres rather.

E. Determining Shares (Continued)

Example 2: Lessee M leases land from the BLM. Lessee M reports the lease to FSA and obtains an FSA-578. Lessee M provides the FSA-578 and BLM master allotment report. The FSA-578 provides the location of the land and reports the producer has 100% share of 10,000 acres. The BLM master allotment report indicates that the total acres within the allotment are 10,000 acres, but 2,000 of those acres are private land within the boundaries of the allotment. The total insurable acreage Lessor M can insure based on this information is 8,000 acres, unless Lessor M provides a record showing ownership or lease of the 2,000 private acres.

Example 3: Landowner X has 200 acres of grazing land that are used for grazing cattle and are reported to FSA as grazing. Landowner X is requested to provide records of livestock ownership and the acreage. To meet the request, Landowner X provides sales records of cattle, an FSA-578, and tax records from the previous year to show ownership of the acreage.

Example 4: Lessee Y leases 100 grazing acres from Lessor Z. Lessee Y reports the lease to FSA and obtains an FSA-578. Lessee Y is requested to provide records of livestock ownership and a lease for the acreage. To meet the request, Lessee Y provides sales records of cattle, an FSA-578, and the lease certification form. The FSA-578 acreage matches the acreage certified on the verified lease certification form and the livestock records support the insurable interest.

NOTE: In this Exhibit, all variations of the terms “acreage” and “colonies” should be read as presented.

To be insured, colonies must be located on acreage the insured owns, leases, or can provide verifiable records specific to the insured grid ID and county that allows the placement of colonies at that location. The insured must possess, when requested for audit or review, acceptable verifiable records. The verifiable records, as defined in the crop provisions, can be used to support insured locations in combination with the lease or lease certification form.

Examples of verifiable records that may be used to support permission to be on the land and that colonies were physically located at insured locations may include, but is not limited to:

Leases;

Legal deeds;

Lease certification form combined with verifiable records that may include, but not limited to:

Photos with latitude/longitude markers that also show the colonies with ownership identification;

Trucking logs;

Written documentation;

Example: an email/text from landowner granting permission to place colonies.

Compensation Receipts;

May include, but is not limited to:

Cash;

Share of insured crop;

Proceeds;

Labor;

Honey; and

Service contracts (including services such as pollination).

Verbal agreements are NOT acceptable verifiable records.

Important: The lease certification form may be used to certify that there is a lease, or agreement/arrangement that allows placement of colonies in the insured grid ID and county. If revealed that the lease certification form is not verifiable or that it was false and no agreement existed, the insured be subject to section 16(d) of the Basic Provisions, no indemnities will be paid and the insured will still owe premium.