

## **Summary Overview of Rainfall Index Insurance plan for Pasture, Rangeland, and Forage**

The Rainfall Index (RI) insurance plan is a pilot area insurance plan for pasture, rangeland, and forage (PRF) grown for the intended use of grazing by livestock or haying. The RI-PRF insurance plan is a risk management tool designed to insure against a decline in an index value that is based on the long-term, historical, average precipitation for the same area of land for the same period of time. It does not measure, capture, or use the actual crop production of any producer or any of the actual crop production within the area.

Unlike other Federal crop insurance area insurance plans that are based on county boundaries, the RI-PRF program uses a numbered grid system. Each grid covers an area equal to 0.25 degrees in latitude by 0.25 degrees in longitude and is identified by a specific number code, referred to as a grid ID. The grids are created by the National Oceanic and Atmospheric Administration Climate Prediction Center (NOAA CPC), and do not follow state, county, or other geopolitical boundaries.

The RI-PRF program uses NOAA CPC, gridded, daily, interpolated, precipitation data. The gridded precipitation data is obtained for the following 11 2-month time periods, referred to as index intervals, during a year for each grid ID. Historical NOAA CPC gridded data from 1948 to present is also obtained for each index interval and grid ID:

- January and February;
- February and March;
- March and April;
- April and May;
- May and June;
- June and July;
- July and August;
- August and September;
- September and October;
- October and November; and
- November and December.

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 present.

The Final Grid Index is based on NOAA CPC, gridded, 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; therefore, precipitation received during prior index intervals has no effect on subsequent index interval results.

The gridded precipitation data is not simply the measurement of precipitation from a specific rain gauge(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. However, different reporting stations may be used from day to day because not all reporting stations report data every day.

Accordingly, the gridded precipitation data is an interpolated value for the entire grid and cannot be traced to a single point or reporting station(s). The precipitation data used by RI-PRF may not match the amount of precipitation received by a producer in a specific location(s).

Indemnity payments are earned by eligible producers when the Final Grid Index is less than the result of multiplying the Expected Grid Index by the coverage level selected by the producer, which is referred to as the Trigger Grid Index. RI-PRF only covers a decline in the precipitation index, it does not cover other perils such as, but not limited to, flood, fire, and hail. The NOAA CPC data used to calculate the Final Grid Index and the Expected Grid Index is conclusively presumed to be accurate. The Risk Management Agency (RMA) does not alter NOAA CPC data.

Because RI-PRF is an area insurance plan and does not measure, capture, or use any actual crop production, an eligible producer may experience a production loss and not receive an indemnity payment. However, it is also possible for an eligible producer to receive an indemnity payment without suffering a loss of actual production. The producer's amount of production is not considered and no on-the-ground inspection of crop conditions is conducted to determine eligibility for an indemnity payment.

Producers should carefully consider the following when determining whether to participate in the RI-PRF insurance plan:

- RI-PRF does not measure, capture, or use the actual crop production of any producer or any of the actual crop production within the area. Indemnity payments are earned by eligible producers only when the Final Grid Index is less than their Trigger Grid Index.
- RI-PRF uses the long-term, historical, gridded, precipitation data for the grid ID and index interval. Producers should carefully review the historical experience of each grid ID and index interval they are considering to determine whether their actual production has followed the average precipitation patterns for the grid. RI-PRF is best suited for producers whose production tends to follow the historical precipitation patterns. RMA provides historical indices information for each grid ID and index interval on its website to assist producers.
- RI-PRF offers 11 index intervals in which eligible PRF may be insured. Selection of the appropriate index interval(s) is critical. To be an effective risk management tool, producers must select the index intervals that include the time period when precipitation is needed to produce grazing and/or haying forage under normal conditions. Selecting an index interval when precipitation is not needed or normally does not occur is not an effective use of the program.
- The gridded precipitation data is an interpolated value for the entire grid and cannot be traced to a single point or reporting station. The precipitation received by a producer at a specific location(s) may not match the Final Grid Index.