# PASTURE, RANGELAND AND FORAGE RMA AWARDS CONTRACTS

#### **BACKGROUND:**

On February 10, 2004, the Risk Management Agency (RMA) released a Statement of Objectives for research and development of Risk Management Products for Pasture/Rangeland and Forage, with the goal of serving the vital needs in this area of livestock producers. Publicly and privately owned range, pasture and forage lands cover about 55% of the Nation's total land area.

RMA's goal was to obtain proposals, which provided improvements to existing crop insurance programs for pasture, rangeland and forage; or researched and developed new and innovative crop insurance programs for pasture, rangeland, forage and hay.

On March 2, 2004, RMA held a pre-proposal conference. RMA then established a Forage, Pasture/Rangeland Technical Evaluation Team that evaluated and awarded the development contracts based on their respective merits and their potential to result in viable risk management products for producers.

The Statement of Objective was released in answer to calls from Congress, the Department of Agriculture, and FCIC Board of Directors.

## Pasture/Rangeland Scope

- Nationwide
- Total Acreage 931,795,255 (per 1997 Census)
- Pasture/Rangeland Insured Acreage 2003 9,306,007

## Forage/Hay Scope

- Nationwide
- Hay Acreage 60,799,788 (per 1997 Census)
- Alfalfa Hay Acreage 21,309,784 (per 1997 Census)
- Total Forage Production and GRP Forage Production Acreage Insured in 2004 3,652,913

#### **OUTCOME:**

## 1.) Plan for Pasture/Rangeland and Dryland Hay - Watts and Associates

Contract Amount - \$3,126,552.64

This proposal will seek to develop a viable risk management tool by employing a dual index consisting of a satellite based vegetative index and a proxy crop. This satellite technology can actually be used to measure vegetation changes on the ground.

The satellite data and the use of a proxy crop creates a dual trigger to act as a back-up mechanism in case one trigger fails to accurately reflect the forage condition in a given year. The producer will be paid the greater of the indemnity amount computed from the vegetative

index, or from the county level proxy crop. This plan doesn't measure forage growth, but will let us know when there is a deviation from normal to determine probable losses.

This approach will ultimately be national in scope, but the initial pilot test will be aimed at Western states including portions of northeast Nevada, southwest Wyoming, and all of Utah, along with counties in Texas and New Mexico that lie on the border separating these two states. The pilot program for the Western states is targeted to begin with the 2007 growing season, with an Eastern states pilot to follow one year later.

# 2.) Temperature Constrained NDVI Index - Grazingland Management Systems, Inc.

Contract Amount – \$1,519,862.08

NDVI stands for Normalized Difference Vegetation Index. This Temperature Constrained NDVI utilizes data derived from satellite-based remote sensing imagery which will describe the seasonal growth dynamics of vegetation for the target area. This technological tool will provide a method for effectively indexing forage yield at different points in time throughout the year. The current index value can then be compared to the long-term average of that index for the same points in time. This process lets us calculate the deviation from normal and gives us the basis for different levels of insurance coverage, and the trigger mechanism to define the basis for claims payments.

This NDVI approach begins with six pilot areas located in more than 200 counties in the states of Pennsylvania, South Carolina, Oklahoma, South Dakota, Colorado, and Oregon. The pilot program is targeted to begin with the 2006 growing season.

## 3.) Seasonal Growth Constrained Rainfall Index – Grazingland Management Systems, Inc.

Contract Amount – \$1,544,940.34

The Seasonal Growth Constrained Rainfall Index is based on a combination of a weighted warm-season/cool-season indexing period and NOAA's rainfall data system. The precipitation data is provided from 1948 to the present in the form of grids that have a resolution of approximately a 12x12 mile square. This method relieves the problem of using only station data where there are large distances between stations. The index will not predict absolute levels of forage production. It is however, an expression of relative growth and the deviation from normal growth is reflected in the mechanism used to value forage.

The Seasonal Growth Constrained Rainfall Index is initially aimed at 220 counties in Colorado, Idaho, North Dakota, Pennsylvania, South Carolina, and Texas. The pilot program is targeted to begin with the 2006 crop year.

# 4.) Precipitation Index – AgriLogic, Inc.

Contract Amount - \$412,239.24

This proposal will utilize a rainfall index, based on a weighted average amount of precipitation during a particular time period at a particular weather station. The general concept follows the current Group Risk Plan since indemnity payments are not based on the individual's ability to produce or the resulting production, but on a season-ending rainfall index value.

The Precipitation Index is initially aimed at covering the states of Alabama, Missouri, New York, and Wyoming. The pilot program is expected to begin with the 2005 growing season.

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